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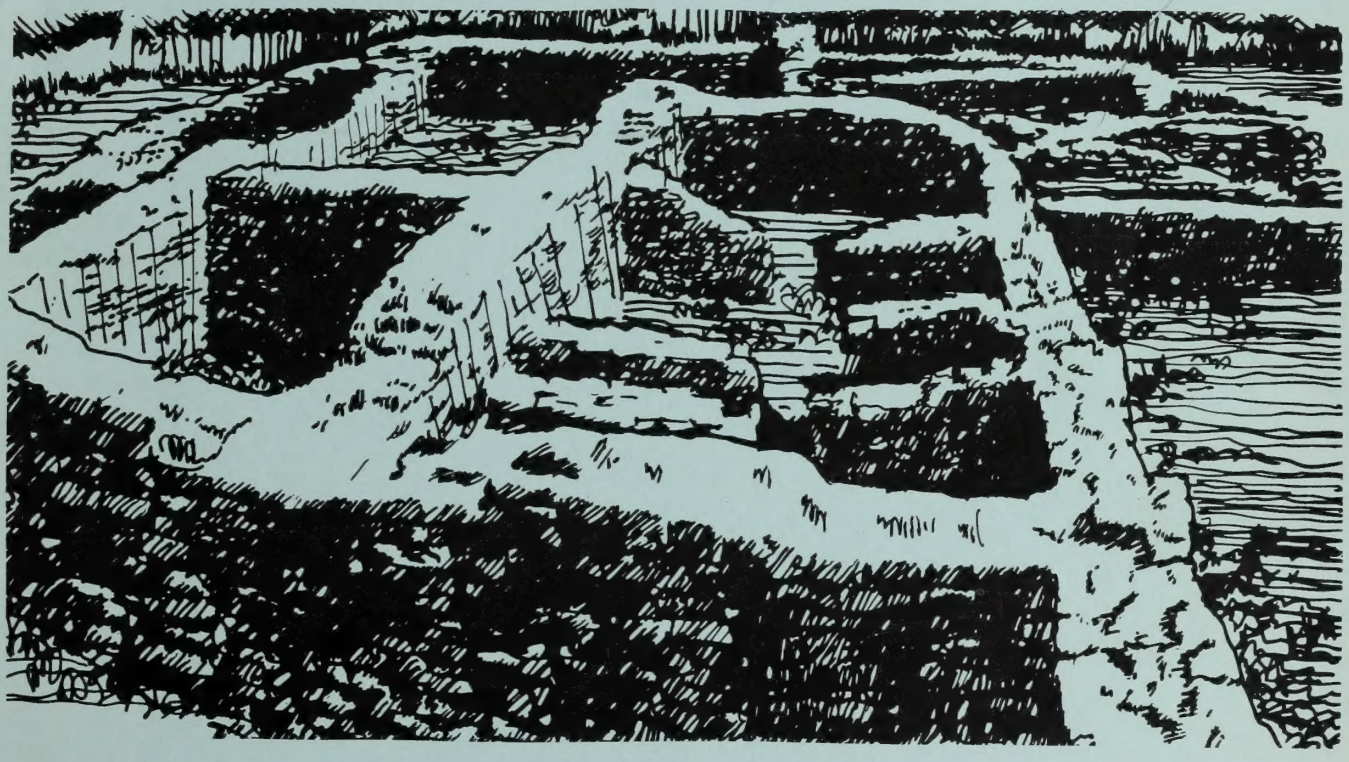
RESOURCE MANAGEMENT PLAN



and Environmental Impact Statement

Bureau of Land Management

Montrose District, Colorado

FINAL DECEMBER 1984

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
San Juan Resource Area Office
Room 102, Federal Building
701 Camino del Rio
Durango, Colorado 81301

IN REPLY
REFER TO:

December 1984

Enclosed for your review is the Final Environmental Impact Statement (FEIS) on the San Juan-San Miguel Resource Management Plan (RMP). This document analyzes the impacts of managing all of the public land resources as a whole rather than singly. It contains the proposed RMP, hereinafter referred to as the "Proposed Plan," which refines the Preferred Alternative presented in the Draft EIS (DEIS) published in April 1984. The Proposed Plan is the BLM's proposed action.

With the exception of certain wilderness recommendations, all parts of this Proposed Plan may be protested. Any person who participated in the planning process and has an interest which is or may be adversely affected by the approval of this FEIS may protest such approval. A protest may raise only those issues which were submitted for the record during the planning process and should be filed with the Director (202), Bureau of Land Management, U.S. Department of the Interior, 18th and C Streets, NW, Washington, D.C. 20240. To be timely, a protest must be filed prior to January 14, 1985. A protest must contain the following information:

1. The name, mailing address, telephone number, and interest of the person filing the protest.
2. A statement of the issue(s) being protested.
3. A statement of the part(s) of the plan or amendment being protested.
4. A copy of all documents or issues that were submitted during the planning process by the protesting party or an indication of the date the issue(s) were discussed for the record.
5. A concise statement explaining why the BLM State Director's decision is believed to be wrong.

No sooner than the end of the 30-day protest period and after the Governor's Consistency Review, a record of decision will be issued. Approval shall be withheld on any portion of the plan under protest until final action has been completed on such protest.

The record of decision will be issued no sooner than February 1985.

Sincerely,

Paul W. Arrasmith

Paul W. Arrasmith
District Manager

ID: 88001867

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PROPOSED

RESOURCE MANAGEMENT PLAN

AND

ENVIRONMENTAL IMPACT STATEMENT

FOR THE

SAN JUAN/SAN MIGUEL PLANNING AREA

FEIS-84-31

Prepared By

U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

Paul W. Brossmith

DISTRICT MANAGER
MONTROSE DISTRICT

I concur: Kenneth Burkhardt

COLORADO STATE DIRECTOR

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RESOURCE MANAGEMENT PLAN/ ENVIRONMENTAL IMPACT STATEMENT

for the

SAN JUAN-SAN MIGUEL PLANNING AREA

DRAFT ( ) FINAL (X)

The United States Department of the Interior, Bureau of Land Management

1. Type of Action: Administrative (X)
   Legislative ( )

2. Abstract: This Final Resource Management Plan and Environmental Impact Statement describes and analyzes four alternatives for managing the public lands and resources in the San Juan-San Miguel planning area, which are: (1) Resource Conservation, (2) Resource Utilization, (3) Current Management (No Action), and (4) Proposed Plan.

3. Comments have been requested from the following: See Chapter 4, Consultation and Coordination, for a list of individuals and groups on our mailing list.

4. For further information, contact:

   David J. Miller, Area Manager
   Bureau of Land Management
   San Juan Resource Area
   Room 102, Federal Building
   701 Camino del Rio
   Durango, Colorado 81301
   Telephone: (303) 247-4082

5. Protests must be received no later than: **January 14, 1985.**

San Juan/San Miguel
RMP/EIS

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FINAL COAL UNSUITABILITY REPORT: ANALYSIS OF THREE POTENTIAL LEASE AREAS (DURANGO, EAST CORTEZ, AND NUCLA)

Introduction

On August 3, 1977, the President signed into law the Surface Mining Control and Reclamation Act (SMCRA). Section 522 of the Act requires the Secretary of the Interior to conduct a Federal lands review to determine those lands unsuitable for surface coal mining or surface operations and also to determine impacts of underground coal mining. The analysis in this report is being conducted as part of the resource management plan process for the San Juan-San Miguel planning area.

Twenty criteria (43 CFR 3461.1) were used to assess the unsuitability for mining of areas of medium to high potential for coal recovery--classified by the U.S. Geological Survey (USGS) as Known Recoverable Coal Resource Areas (KRCRAs). The intent of the criteria is to identify any area (or areas) within the KRCRAs that contain sensitive or unique characteristics that could not be properly protected or maintained if the area were leased for coal mining. Areas so identified will be removed from further consideration for coal leasing. Applying these twenty criteria to all areas that may be leased for coal mining ensures that evaluating Federal lands is accomplished in a consistent, uniform, and objective manner so that coal development planning will be concentrated in areas where environmental conflicts are less likely to add delay, cost, or conflict to production efforts.

In 1983, the coal regulations were modified to include all lands that were nominated by industry or private citizens for suitability for possible future coal leasing. In general, these areas correspond to the areas delineated by USGS as KRCRAs. In this report, the KRCRA boundaries were used with minor modification to reflect current geologic knowledge of the areas within those KRCRAs.

The unsuitability criteria are designed to be applied only to those areas in which surface (strip) mining of coal will occur or to those areas in which underground mining of coal will produce surface effects (such as subsidence, disturbance to surface occupancy, fire, etc.). Areas in which underground mining of coal will not produce such surface effects are exempt from applying the criteria. However, because it is not known at this time which areas will be sought for lease, this analysis includes high to medium potential coal areas in the KRCRAs administered by the BLM, both surface or subsurface.

Durango Coal Area

The Durango coal area (see Maps 1 through 4, extending from Mesa Verde National Park to the west and east to the Piedra River), is located in the south-central portion of the San Juan-San Miguel planning area and consists of a total acreage of approximately 143,780 acres. It is the largest unit in this unsuitability analysis and has two existing coal lease areas--National King Coal and Chimney Rock. Of the total acreage assessed for surface mining, 13,400 acres or nine percent of the total area has been found unsuitable (see Table 1). In addition, 10,440 acres of the Durango KRCRA has been determined to be unsuitable for all methods of mining (see Table 2).

Nucla Coal Area

Located in the northwest portion of the San Juan-San Miguel planning area, the Nucla coal area (see Map 5) consists of three small land parcels totalling 2,080 acres. Of the total acreage, 280 acres has been assessed unsuitable for surface mining (see Table 1).

East Cortez Coal Area

The East Cortez coal area (see Map 6) is located just two miles east of Cortez, Colorado, in the southwest portion of the San Juan-San Miguel planning area. It consists of a total acreage of 2,840 acres; 25 percent (720 acres) has been assessed unsuitable for surface mining. Table 2 summarizes the results of applying the twenty coal unsuitability criteria to the East Cortez area.

Summary

Three regions within the planning area have been examined for potential coal leasing (see Map 7). The Nucla coal area, totaling 2,080 acres, consists of three small land parcels in the Nucla-Naturita area. The East Cortez coal area is a single block of 2,840 acres located two miles east of Cortez. In both cases, the land is administered by the BLM or has private surface and Federal subsurface minerals. The Durango coal area is widespread, extending from Mesa Verde National Park to the west and east to the Piedra River and covers 143,780 acres; it consists of fragmented Federal-private owners hip blocks and contains two existing coal lease areas: National King Coal and Chimney Rock (lease numbers C-29125 and C-34886).

Only four percent of the Durango KRCRA contains coal suitable for surface (strip) recovery. Approximately eleven percent may be recovered by surface or underground methods; the remaining eighty-five percent is only suitable for recovery by underground methods. Both the East Cortez and Nucla KRCRAs contain surface mineable reserves.

Table 1 summarizes the results of applying the twenty coal unsuitability criteria. Additional site-specific data may be necessary in some instances; as well, small buffer zones or portions of each KRCRA may be unsuitable for further consideration. Several criteria required applying exceptions. Following is a list of all stipulations generated from applying the twenty criteria and the exceptions:

Due to the limitations caused by mapping scale (1/2" = 1 mi), 40-acre parcels were the smallest tracts delineated in this coal report. When site-specific analysis and mine plan reviews are conducted, a more detailed mapping scale and data could result in refining the application of the coal unsuitability criteria.

DURANGO KRCRA	EAST CORTEZ KRCRA	NUCLA KRCRA
Analysis--Menefee Mountain and Weber Mountain WSAs shall be considered unsuitable for coal leasing while they are under review for wilderness recommendation. Further consideration for coal leasing could be undertaken if the area is released from wilderness recommendation.	Analysis--The study areas should not be considered unsuitable for further coal lease consideration due to this criterion.	Analysis--Same as the East Cortez KRCRA.

Criterion Number 5--Scenic Federal Lands. Scenic Federal lands designated by visual resource management analysis as Class I (an area of outstanding scenic quality or high visual sensitivity) but not currently on the National Register or Natural Landmarks shall be considered unsuitable. A lease may be issued if the surface management agency determines that the surface coal mining operation will not significantly diminish or adversely affect the scenic quality of the designated area.

Findings--There are no designated Class I visual areas within the KRCRA.	Findings--Same as the Durango KRCRA.	Findings--Same as the Durango KRCRA.
Analysis--The study areas should be considered suitable for further coal lease consideration.	Analysis--Same as the Durango KRCRA.	Analysis--Same as the Durango KRCRA.

Criterion Number 6--Lands Used for Scientific Study. Federal lands under permit by the surface management agency and being used for scientific studies involving food or fiber production, natural resources, or technology demonstrations and experiments shall be considered unsuitable for the duration of the study, demonstration or experiment, except where mining could be conducted in such a way as to enhance or not jeopardize the purposes of the study, as determined by the surface management agency, or where the principal scientific user or agency gives written concurrence to all or certain methods of mining.

Findings--There are no Federal lands within the KRCRA under permit and being used for scientific studies	Findings--Same as the Durango KRCRA.	Findings--Same as the Durango KRCRA.

DURANGO KRCRA	EAST CORTEZ KRCRA	NUCLA KRCRA
Exception Analysis (continued) 1. Impose a seasonal closure or curtail vehicular and human activity (Dec. 1 to April 30) on all areas identified as most critical winter range. 2. Impose a seasonal closure or curtail vehicular and human activity (April 16 to July 14) on all areas identified as elk calving grounds.		
Criterion Number 16--Floodplains. Federal lands in riverine, coastal, and special floodplains (100-year recurrence interval) on which the surface management agency determines that mining could not be undertaken without substantial threat of loss of life or property shall be considered unsuitable for all or certain stipulated methods of coal mining.		
Findings--There are several major tributaries to the San Juan River that flow across the Durango KRCRA (see Maps 8, 9, and 16), including Stollsteimer Creek and the Piedra, Los Pinos, Florida, Animas and La Plata rivers.	Findings--There are no special floodplains in the East Cortez KRCRA.	Findings--There are two potential floodplains within the Nucla KRCRA (see Map 13); the San Miguel River and Maverick Draw.
Analysis--Those portions of the KRCRA falling within the 100-year floodplains associated with the above-mentioned drainages should be designated unsuitable for surface mining operations but should receive further consideration for coal leasing where mining operations would be by subsurface methods.	Analysis--The study area should not be considered unsuitable for further coal lease consideration due to this criterion.	Analysis--Same as the Durango KRCRA.

DURANGO KRCRA	EAST CORTEZ KRCRA	NUCLA KRCRA
Analysis (continued) Pending additional information, the study areas should be considered suitable for further coal lease consideration. Those portions of the area crossed by water sources supplying water to off-study area flood plains should be considered unsuitable for further coal lease consideration to the boundaries of the 100-year flood stage level. This area would include the bank-full stream channel and alluvial fill associated with it. However, any impacts to these drainages which would materially damage the quantity or quality of water from these water courses can be mitigated by the following measures: Any proposed activities in or adjacent to the floodplains will require approval from BLM on a site-specific basis after consultation with the U.S. Geological Survey.		

Criterion Number 17--Municipal Watersheds. Federal lands which have been committed by the surface management agency to use as municipal watersheds shall be considered unsuitable.

Findings--There are no known municipal watersheds within the Durango KRCRA.	Findings--Same as the Durango KRCRA.	Findings--Same as the Durango KRCRA.
Analysis--The study area should be considered suitable for further coal lease consideration due to this criterion.	Analysis--Same as the Durango KRCRA.	Analysis--Same as the Durango KRCRA.

DURANGO KRCRA	EAST CORTEZ KRCRA	NUCLA KRCRA
Criterion Number 18--National Resource Waters. Federal lands with National Resource Waters, as identified by states in their water quality management plans, and a buffer zone of Federal lands 1/4 mile from the outer edge of the far banks of the water, shall be considered unsuitable.		
Findings--There are no National Resource Waters within the Durango KRCRA.	Findings--Same as the Durango KRCRA.	Findings--Same as the Durango KRCRA.
Analysis--The study area should be considered suitable for further coal lease consideration due to this criterion.	Analysis--Same as the Durango KRCRA.	Analysis--Same as the Durango KRCRA.
Criterion Number 19--Alluvial Valley Floors. Federal lands identified by the surface management agency, in consultation with the state in which they are located, as alluvial valley floors according to the definition in Section 3400.0-5(a) of this title, the standards in 30 CFR Part 822, the final alluvial valley floor guidelines of the Office of Surface Mining's Reclamation and Enforcement when published, and approved state programs under the Surface Mining Control and Reclamation Act of 1977, where mining would interrupt, discontinue, or preclude farming, shall be considered unsuitable. Additionally, when mining Federal land outside an alluvial valley floor would materially damage the quantity or quality of water in surface or underground water systems that would supply alluvial valley floors, the land shall be considered unsuitable.		
Findings--There are several potential alluvial valley floors within the Durango KRCRA, including the Mancos, Animas, Florida, Los Pinos, and Piedra rivers; and Cherry, Hay, Lightner, South Fork Texas, Bear, Beaver, and Stollsteimer creeks (see Maps 8, 9, and 16).	Findings--There are two potential alluvial valley floors within the East Cortez KRCRA--Kernan and Stinking Springs canyons (see Map 17).	Findings--There are two potential alluvial valley floors within the Nucla KRCRA--the San Miguel River and Maverick Draw (see Map 13).
Analysis--Those portions of the KRCRA falling within the above-mentioned potential alluvial valley floors should be designated unsuitable for surface mining operations but should receive further consideration for coal leasing where mining operations would be by subsurface methods.	Analysis--Same as the Durango KRCRA.	Analysis--Same as the Durango KRCRA.

DURANGO KRCRA	EAST CORTEZ KRCRA	NUCLA KRCRA

Analysis (continued)

Pending additional information discussing where subsurface mining would interrupt, discontinue, or preclude farming, the areas should be considered suitable for further coal lease consideration due to this criterion. Those portions of the area crossed by water sources supplying water to off-study area floodplains should be considered unsuitable for further coal lease consideration to the boundaries of the 100-year flood stage level. This area would include the bank-full stream channel and alluvial fill associated with it. However, any impacts to these drainages which would materially damage the quantity or quality of water from these water courses can be mitigated by the following measures:

Any proposed activity in or adjacent to the alluvial valley floors will require approval from BLM on a site-specific basis after consultation with the State of Colorado.

Criterion Number 20--State Proposed Criteria. Federal lands in a state to which is applicable a criterion (i) proposed by that state, and (ii) adopted by rulemaking by the Secretary, shall be considered unsuitable (see Map 18).

Findings--To date the State has proposed no criterion.	Findings--Same as the Durango KRCRA.	Findings--Same as the Durango KRCRA.
Analysis--The study areas should be considered suitable for further coal lease consideration due to this criterion.	Analysis--Same as the Durango KRCRA.	Analysis--Same as the Durango KRCRA.

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PREFACE

Introduction

The San Juan/San Miguel Final Resource Management Plan and Environmental Impact Statement (RMP/EIS) is an entire reprint of the Draft RMP/EIS, incorporating numerous changes and corrections that resulted from comments on the Draft and changes in BLM policy since the Draft was written. Appendix Ten includes letters from people and organizations commenting on the Draft RMP/EIS, the transcripts of the oral testimony given at the public hearings on the Draft RMP/EIS (held in late June and early July 1984), and responses to those comments. Those of you who commented on the Draft are encouraged to turn to Appendix Ten to see how your comments were handled.

Significant Changes Between the Draft and Final

In most cases, comments required corrections or clarifications to the text. These changes have been made and generally do not significantly alter the analysis but simply clarify it for you, the reader. In other cases, the analysis has been expanded to add new information in response to comments. The following discussion outlines the major differences between the Draft and the Final RMP/EIS (by resource):

Proposed Plan

The Proposed Plan was developed from the alternatives identified and evaluated in the Draft RMP/EIS. While it closely follows the Preferred Alternative of the Draft, several significant changes have been made in response to public comments or as a result of changes in BLM policy.

Livestock Grazing

The No Grazing Subalternative to the Resource Conservation Alternative has been rewritten in response to public comments to clarify the impacts associated with this alternative.

Minerals

The Draft RMP/EIS recommended that several areas not be leased for oil and gas values due to conflicting resource values and limitations on directionally drilling those resources. These areas have been changed from a no-leasing category to a no-surface occupancy leasing stipulation, based on recent changes in BLM policy. Protecting the surface resource values will still occur, but industry may now use any technology to develop the oil and gas resources that are available now or will be available in the future.

Cultural Resources

Two new cultural emphasis areas have been added to protect significant values present at the Lightning Tree Tower Group and the Hanging Flume (see Chapter 2 for narrative).

PREFACE

Wild Horses

In response to several public comments and after BLM review, it has been decided that the wild horses present in the planning area should be removed. This removal will provide future management options and also will protect fragile resources present in the wild horse herd areas.

Changes Not Incorporated in the Final RMP/EIS

Level of Detail

Several comments requested quantitative and site-specific information especially related to the discussion of environmental impacts in Chapter Three. The majority of these comments appear to have resulted from a misunderstanding of the BLM planning system. A mistake often made is to assume that the RMP should contain enough detail to allow immediate design and implementation of field projects. It would be impossible to accomplish that level of planning on a million acres of public land, given the present time and budget constraints. BLM uses the activity plans by program (range, wildlife, etc.) to provide the site-specific detail needed to complete projects as personnel and funds are made available.

Maps

The alternative maps that accompanied the Draft RMP/EIS were not revised. They are incorporated in their entirety by reference in the Final RMP/EIS.

SUMMARY

Introduction

Four alternatives are considered in detail in this Resource Management Plan/ Environmental Impact Statement (RMP/EIS), three of which--Current Management (no action), Resource Conservation, and Resource Utilization--were developed to explore a reasonable range of alternatives. The fourth alternative--the Preferred Alternative, herein called the "Proposed Plan," incorporates portions of the Current Management, Resource Conservation, and Resource Utilization alternatives and generally represents a balanced approach to resource management. They were developed as multiple use alternatives and are realistic, implementable and comply with Council on Environmental Quality (CEQ) and Bureau of Land Management (BLM) planning regulations.

Proposed Plan

Introduction

The Proposed Plan balances competing demands by providing goods and services while protecting important and sensitive environmental values. The goal of this alternative is to change present management to the extent necessary to meet statutory requirements and policy commitments and to resolve identified issues in a balanced, cost-effective manner. The following discussion describes the overall management that would result from implementing this alternative.

Seventy-one Allotment Management Plans (AMPs) would be developed on approximately 810,000 acres. The estimated cost for range improvements required to implement this alternative is approximately $1 million. Authorized livestock use in the planning area could increase in the long term. The projected result of all adjustments would be an initial reduction of 22,461 AUMs (33%) from current active preference (see Glossary). In the long term, livestock use would be projected to increase to 73,601 AUMs or 13 percent above current active preference. This alternative could result in beneficial, long-term impacts to livestock operators because of increases in livestock production. Designating the Sacred Mountain area as an Area of Critical Environmental Concern (ACEC), now called the Anasazi Culture Multiple Use Area, could have long-term, positive impacts to livestock management due to increased monitoring and supervision.

This alternative could result in long-term improvements in ecological vegetation condition covering the entire planning area. That portion of the area in excellent condition would remain unchanged, while the percentage in good condition would increase from 3 percent to 8 percent, and the percentage in fair condition would increase from 23 percent to 26 percent. Poor condition sites would decrease from 39 percent to 31 percent.

Wildlife habitat would be managed to support the current population levels of 20,000 deer and 1,600 elk, subject to the availability of manpower and funds to complete necessary wildlife habitat improvements. Pronghorn antelope would increase to 300 animals and the reintroduction of 300 bighorn sheep in the Dolores River Canyon would be allowed. Protective stipulations for threatened and endangered (T&E) species would be provided. An estimated $528,000 would be necessary to complete the improvements and Habitat Management Plans (HMPs) projected under this alternative. Terrestrial wildlife habitat conditions

should improve significantly, covering the majority of the planning area. T&E species would benefit from the provided protection. Long-term positive impacts to wildlife could occur from designating the Sacred Mountain area an ACEC due to more intensive management.

Aquatic and riparian habitat would be improved on the following rivers and their tributaries (in priority order): the upper San Miguel, the upper Dolores, and the lower San Miguel. An estimated $233,000 is projected to develop HMPs and to implement necessary improvements. Long-term positive impacts on 94 miles of aquatic and riparian habitat could be realized under this alternative. Intensive livestock and wildlife management would improve an additional 306 miles of habitat.

Managing the Silverton Special Recreation Management Area (SRMA) would continue. The Dolores River Canyon would be managed as an SRMA and an allocation system for visitor use would be implemented. Recreation management plans for both SRMAs would be developed. The McElmo Research Natural Area would be maintained and the proposed mineral withdrawal would be removed.

Protecting and enhancing recreation resources by management and imposing development restrictions could have long-term positive impacts to recreation and overall would continue to provide the settings and opportunities most desired by the public. Wilderness designation could have both positive and negative long-term impacts to recreation opportunities and settings.

The Dolores River Canyon WSA (approx. 28,539 acres) would be recommended for wilderness designation; as a result, over the long term, wilderness values would generally be maintained. The other seven WSAs would be returned to multiple use management under various other emphases resulting in a loss of wilderness values for those areas.

Ninety-three percent of the total acreage available for oil and gas consideration would be open to development without lease stipulations. Approximately four percent would be open to development with lease stipulations (no-surface occupancy) to protect wildlife, cultural resources, and recreation values. Less than three percent of the total acreage would be closed to leasing because of designating the Dolores River Canyon WSA as wilderness. Approximately 34,000 acres (3%) of the area would be closed to mineral entry. An estimated 46,000 acres (1.5 billion tons) of the Durango Known Recoverable Coal Resource Area (KRCRA) and 1,480 acres (26.6 million tons) of the Nucla KRCRA would be available for coal leasing and 100 percent of the East Cortez KRCRA would not be presently available for leasing or development during the term of this plan. It could still be considered for leasing in the future, subject to a plan amendment being completed. This alternative would result in significant, long-term adverse impacts to mineral development because of withdrawals from mineral entry and from no leasing and no-surface occupancy stipulations.

This alternative would provide continued protection and management to important cultural sites and areas. Overall long-term benefits could occur because of the protective withdrawals and stipulations to mineral development. Designating the Anasazi Culture Multiple Use Area as an ACEC could have long-term positive impacts to cultural resources. The Tabeguache Creek area would be managed as a Outstanding Natural Area.

Land actions (through sales, exchange, or title transfer) could be allowed on approximately 21,800 acres or 2.2 percent of the public lands in the planning area, a long-term impact which would improve the efficiency of management on all BLM-retained lands.

All wild horses would be removed from the Naturita Ridge and Spring Creek Basin herd areas. There would be negative impacts to wild horse viewing. Positive, long-term impacts to vegetation, livestock grazing, and wildlife resources could occur as a result of removing the wild horses.

Intensive timber management on approximately 10,960 acres would be provided. The estimated allowable harvest would be 6.5 million board feet (MMBF) per decade. An additional 42,130 acres would be managed to provide woodland products, creating an estimated allowable harvest of 6.4 MMBF (12,800 cords) per decade. Insignificant production losses due to proposed and existing management could occur. Over the long term, improved management could result in increased wood fiber production.

Approximately 65,000 acres of intensive watershed management would be implemented to reduce erosion and sediment yields. To reduce salinity in the Colorado River, 46,000 acres would be intensively managed. Long-term significant decreases in erosion, sediment, and salinity yields could occur. Municipal and domestic water sources would be protected.

Improving fire management in a natural ecological setting would occur. Natural successional changes in vegetation communities would be enhanced.

Public lands would be designated 79 percent open, 11 percent limited, and 10 percent closed to ORVs.

Increased revenues are projected from mineral resources and recreation; however, no significant socioeconomic impacts in the planning area would occur as a result of this alternative.

Resource Conservation Alternative

Introduction

This ecologically preferred alternative provides management direction to enhance nonconsumptive natural resource values. Multiple resource uses will continue in most areas; however, some areas may allow limited use or may be closed to specific resource uses, such as mineral development or access through sensitive wildlife areas. Projects that enhance resource values such as improving wildlife and riparian areas would receive priority. The following discussion describes the overall management that would result from implementing this alternative.

Fifty-three AMPs would be developed on approximately 694,000 acres, with the estimated cost for range improvements required to implement this alternative $430,000. Authorized livestock use in the planning area would be significantly reduced. The projected result of all adjustments would be an initial reduction of 29,062 AUMs (45%) from current active preference. In the long term, livestock use would be projected to decrease to 43,160 AUMs, or 33 percent below current active preference. Implementing this alternative could result in a significant monetary loss to livestock operators due to lowered livestock production in both the short and the long term.

SUMMARY

Impacts of this alternative could be long-term improvements in ecological vegetation conditions covering the entire planning area. That portion of the area in excellent condition would remain unchanged; however, the percentage of the area in good condition would increase from 3 percent to 5 percent, while the percentage in fair condition would increase from 23 percent to 24 percent. Poor condition sites would decrease from 39 percent to 36 percent.

Wildlife habitat would be managed to support current population levels of 20,000 deer and 1,600 elk. Pronghorn antelope would increase to 300 animals and the reintroduction of 300 bighorn sheep in the Dolores River Canyon would be allowed. Protective stipulations would be provided for T&E species. An estimated $358,000 would be necessary to complete the improvements and projected HMPs. Terrestrial wildlife habitat conditions would improve over the majority of the planning area and T&E species would benefit from the provided protection.

The aquatic and riparian habitat would be improved on the following rivers and their tributaries (in priority order): the upper San Miguel, the upper Dolores, and the lower San Miguel. An estimated $473,000 is projected to develop HMPs and implement necessary improvements. Long-term, positive impacts on 249 miles of aquatic and riparian habitat could be realized under this alternative.

Managing the Silverton SRMA would be continued. The Dolores River Canyon would be managed as an SRMA and a limited allocation system for visitor use would be implemented. Recreation management plans for both SRMAs would be developed.

Protecting and enhancing recreation resources by management and development restrictions could have long-term, positive impacts to recreation and overall would continue to provide the settings and opportunities most desired by the public. Wilderness designation could have both positive and negative, long-term impacts to recreation opportunities and settings.

All eight WSAs would be recommended for wilderness designation. As a result, wilderness values would be generally maintained over the long term on 102,601 acres in the planning area.

Under this alternative, 90 percent of the total considered acreage would be open for oil and gas leasing and development without lease stipulations. Approximately two percent would be open to development with lease stipulation (no-surface occupancy) to protect wildlife, cultural, and recreation values. Approximately 8 percent of the total acreage would be closed to leasing primarily due to wilderness designation. Approximately 13 percent of the public land would be closed to mineral entry under this alternative. An estimated 34,000 acres (943 million tons) in the Durango KRCRA would be available for coal leasing. All of East Cortez and Nucla KRCRAs would not be available for leasing or development. Significant long-term, adverse impacts to mineral development due to the withdrawals from mineral entry and from no leasing and no-surface occupancy stipulations could result.

This alternative would provide continued protection and management emphasis to important cultural sites and areas. Overall long-term benefits could occur due to protective withdrawals, stipulations on mineral development, and wilderness designation. There could be some adverse impacts to cultural resources due to increased visitor use in designated wilderness areas.

SUMMARY

Under this alternative, land disposal (through sales, exchanges, or title transfer) would be allowed on approximately 18,000 acres or 1.8 percent of the public lands in the planning area, a long-term impact which would improve the efficiency of management on all BLM-retained lands.

Seventy-five wild horses in the Spring Creek Basin herd area and 50 wild horses in the Naturita Ridge herd area would be intensively managed. Wild horses could be managed at healthy, viable levels in both areas. Beneficial impacts to wild horse viewing and supplemental values of wild horses in the McKenna Peak WSA would occur.

Intensive timber management on approximately 7,930 acres would be provided. The estimated allowable harvest would be 4.7 MMBF per decade and an additional 35,170 acres would be managed to provide woodland products, creating the estimated allowable harvest of 5.3 MMBF (10,600 cords) per decade. Over the long term, improved management could lead to increased wood fiber production.

Intensive watershed management consisting of 78,000 acres would be implemented to reduce erosion and sediment yields. Approximately 30,000 acres would be managed to reduce salinity in the Colorado River. Long-term, significant decreases in erosion, sediment, and salinity yields could occur. Municipal and domestic water sources would be protected. There could be potential losses of opportunities for erosion, sediment, and salinity control work in designated wilderness areas.

Improved fire management in a natural ecological setting would occur and natural successional changes in vegetation communities would be enhanced.

Wilderness designation would adversely affect access on approximately 102,601 acres. Public lands would be designated 80 percent open, 6 percent limited, and 14 percent closed to ORV use.

No significant socioeconomic impacts in the planning area would occur due to only minor changes in the existing situation.

No Grazing Subalternative. The No Grazing Subalternative was developed to respond to BLM requirements that concern analyzing livestock grazing on public land. All other programs in the Resource Conservation Alternative would be managed as described under that alternative, except domestic livestock would not be licensed on public land.

Livestock use consisting of 64,232 AUMs could be lost in both the short and the long term, which could result in significant, adverse impacts to livestock operators because of lowered livestock production. Both short- and long-term beneficial impacts to vegetation could occur.

A long-term potential decline in habitat condition could occur, but overall impacts would be positive to wildlife habitat. Long-term beneficial impacts to aquatic and riparian habitat, wilderness characteristics and values, and projected, lowered erosion rates could occur.

In the long term, wild horses could increase in the Spring Creek Basin and the Naturita Ridge areas as a result of removing livestock competition.

Approximately 24,000 acres of woodland previously maintained in herbaceous vegetation for livestock could be available for intensive woodland management.

Long-term, beneficial impacts to watershed conditions could occur. Both erosion and sediment yield could be reduced through removing all livestock grazing from the planning area.

Decreased revenues are projected, but no significant socioeconomic impacts in the planning area are projected; however, individual operators would have the potential for severe impacts to their economic well-being.

Ecological Representation Subalternative. The Ecological Representation Subalternative was developed to display the different ecologic systems and supplemental values represented by four of the WSAs. Weber Mountain, Cross Canyon, McKenna Peak, and Dolores River Canyon WSAs would be recommended as suitable for designation as wilderness (subject to the manageability boundaries). These four WSAs all represent different ecologic systems currently not well represented in the National Wilderness Preservation System (NWPS) and that have significant supplemental values.

The potential impacts to all resources could be similar to those impacts discussed under the Resource Conservation Alternative, except that only Weber Mountain, Cross Canyon, McKenna Peak, and Dolores River Canyon WSAs (approx. 65,961 acres) would be recommended for wilderness designation. Therefore, fewer areas would be protected by wilderness designation and more areas would be available for more intensive management activities than under the Resource Conservation Alternative.

Resource Utilization Alternative

Introduction

This alternative emphasizes development and use of economic values and minerals available on the public land. Multiple uses would continue; however, resource values contributing to the local or regional economy would be favored. This alternative would favor mineral exploration development, range utilization, and land disposal; projects relating to these uses would receive priority. The following discussion describes the overall management that would result from implementing this alternative.

One hundred and nine AMPs on approximately 850,000 acres would be developed at a estimated cost of $1.5 million for range improvements. Authorized livestock use in the planning area could significantly increase. The projected result of all adjustments would be an initial reduction of 19,819 AUMs (31%) from current active preference. In the long term, livestock use would be projected to increase to 90,109 AUMs, or 29 percent above current active preference. Implementing this alternative could result in significant, beneficial long-term impacts to livestock operators due to increases in livestock production.

Impacts of this alternative could be significant, long-term improvements in ecological vegetation condition covering the entire planning area. That portion of the area in excellent condition would remain unchanged, while the percentage in good condition

would increase from 3 percent to 10 percent, and the percentage in fair condition would increase from 23 percent to 28 percent. Poor condition sites would decrease from 39 percent to 27 percent.

Wildlife habitat would be managed to support increased population levels of 24,000 deer and 3,000 elk. Pronghorn antelope would increase to 500 animals and the reintroduction of 500 bighorn sheep in the Dolores River Canyon would be allowed. Protective stipulations would be provided for T&E species. An estimated $1 million would be necessary to complete the improvements and projected HMPs. Terrestrial wildlife habitat conditions would improve significantly over the majority of the planning area. T&E species would benefit from the provided protection.

Under this alternative, aquatic and riparian habitat would be improved on the following rivers and their tributaries (in priority order): the upper San Miguel, the upper Dolores, the lower San Miguel, the Upper Animas, and the lower Dolores. An estimated $1.26 million is projected to develop HMPs and implement necessary improvements. It is anticipated that long-term positive impacts on 400 miles of aquatic and riparian habitat could be realized.

Managing the Silverton SRMA would be continued. The Dolores River Canyon would be managed as an SRMA and an allocation system that encourages visitor use would be implemented. Recreation management plans for both SRMAs would be developed.

Protecting and enhancing recreation resources by management and development restrictions could have long-term, positive impacts to recreation and overall would continue to provide the settings and opportunities most desired by the public. Potential losses of wilderness characteristics and values would occur.

Ninety-five percent of the total acreage available for oil and gas consideration would be open to development without lease stipulations. Approximately five percent would be open to development with lease stipulations (no-surface occupancy) to protect wildlife, cultural resources, and recreation values. Less than one percent of the total acreage would be closed to mineral entry. The following would be available for coal leasing: the Durango KRCRA, 54,000 acres (1.8 billion tons), the East Cortez KRCRA, 1,880 acres (13.3 million tons), and the Nucla KRCRA, 1,880 acres (33.8 million tons). Implementing this alternative could result in long-term, adverse impacts to mineral development due to withdrawals from mineral entry and to no leasing and no-surface occupancy stipulations.

This alternative would continue protection and management for important cultural sites and areas. Overall long-term benefits could occur due to protective withdrawals and stipulations on mineral development. However, site-specific, adverse impacts could occur due to mineral development in Cross, Cahone, and Squaw/Papoose canyons.

Under this alternative, land actions (through sales, exchange, or title transfer) would be allowed for approximately 33,000 acres or 3.3 percent of the public lands in the planning area, a long-term impact which would improve management efficiency on all BLM-retained lands.

All wild horses in the planning area would be removed; negative impacts to public viewing could occur. Positive, long-term impacts could occur to vegetation, livestock grazing, and wildlife.

Intensive timber management on approximately 11,220 acres would be provided. The estimated allowable harvest would be 6.6 MMBF per decade. An additional 42,130 acres would be managed to provide woodland products, creating an estimated allowable harvest of 6.4 MMBF (12,800 cords) per decade. Insignificant production losses due to proposed and existing management could occur. Over the long term, improved management could lead to increased wood fiber production.

Intensive watershed management (approx. 50,000 acres) would be implemented to reduce erosion and sediment yields. Approximately 50,000 acres would be managed to reduce salinity in the Colorado River. Long-term significant decreases in erosion, sediment, and salinity yields could occur and municipal and domestic water sources would be protected.

Improving fire management in a natural ecological setting would occur and natural successional changes in vegetation communities would be enhanced.

Public lands would be designated 82 percent open, 10 percent limited, and 8 percent closed to ORV use.

Increased mineral and recreation revenues are projected; however, no significant socioeconomic impacts in the planning area would occur.

Current Management Alternative (No Action Alternative)

Introduction

The Current Management Alternative reflects BLM's current management direction, policies, and existing land use plan decisions. It was assumed that no major policy changes would occur and that the same funding level and apportionment of funds for resource programs would continue. The following discussion describes the overall management that would result from implementing this alternative.

Intensive livestock management on 11 AMPs would be continued on approximately 304,000 acres. The estimated cost for maintaining existing projects is $200,000 from 1984 through 1994. The current active preference of 64,232 AUMs would continue for both the short and the long term. Livestock operators would realize no significant short- or long-term changes in grazing management or livestock production.

In the short term, current vegetation trends would continue. The overall quantity and quality of vegetation produced on public lands would remain essentially unchanged on some sites and in the long term would decline slightly on others.

Wildlife habitat would be managed to support the current population levels of 20,000 deer, 1,600 elk, and 175 pronghorn antelope. Protective stipulations for T&E species would be provided. An estimated $191,000 would be necessary to complete the improvements and HMPs projected under this alternative. Habitat conditions would remain static or they could decline in the long term since big game populations could also decline.

SUMMARY

Some aquatic and riparian habitat could continue to decline; some could remain static or improve under this alternative. Significant beneficial impacts could occur on 94 miles of aquatic and riparian habitat due to intensive management under livestock and wildlife activity plans.

Managing the Silverton SRMA and the Dolores River Canyon would continue. Recreation management plans for both areas would be developed. Protecting and enhancing recreation resources by management and development restrictions could have long-term, positive impacts to recreation and would continue to provide the settings and opportunities most desired by the public. Potential losses of wilderness values could occur. The McElmo Rare Snake and Lizard Research Natural Area would continue to be managed.

Ninety-six percent of the total considered acreage would be open for oil and gas leasing and development without lease stipulations. Approximately three percent would be open to development with lease stipulations (no-surface occupancy) to protect wildlife, cultural resources, and recreation values. Less than 1 percent of the total acreage would be closed to oil and gas leasing because of T&E wildlife species, cultural resources, and recreation values. Less than 1 percent of the area would be closed to mineral entry. Two existing coal leases on 430 acres (14.3 million tons) would continue. Impacts to mineral development under this alternative because of stipulations and restrictions are considered to be insignificant.

Protecting and managing important cultural sites and areas would continue. Overall long-term benefits could occur because of protective withdrawals and stipulations on mineral development. However, site-specific adverse impacts could occur due to increased mineral development in Cross, Cahone, and Squaw/Papoose canyons.

Land disposal (through sales, exchange, or title transfer) would be allowed on approximately 16,000 acres or 1.6 percent of the public lands in the planning area, a long-term impact that would improve the efficiency of management on all BLM-retained lands.

Wild horse populations would continue to increase from the current count of approximately 100 head in Spring Creek Basin and 24 head on Naturita Ridge, increases that could have locally significant adverse impacts to vegetation, livestock management, and big game habitat. In the long term, horse populations could decline in their viability.

Intensive timber management on approximately 9,540 acres of forest lands would continue. The estimated allowable harvest would be 5.6 MMBF per decade. Woodland products (firewood, posts, and poles) for public use would be provided. Insignificant production losses due to proposed and existing management could occur. Over the long term, improved management could lead to increased wood fiber production.

Continued high erosion and sediment yields could occur. In the long term, salt loading in the Colorado River would remain unchanged. Municipal and domestic water sources would continue to be protected.

Public lands are currently 95 percent open, 5 percent limited, and less than 1 percent closed for ORV use.

No significant socioeconomic impacts are currently occurring in the planning area.

CHAPTER ONE - ALTERNATIVES

ATTENTION SPAN

CHAPTER ONE

PURPOSE AND NEED

The San Juan-San Miguel Resource Management Plan/Environmental Impact Statement (RMP/EIS) is being prepared to provide a comprehensive framework for managing and allocating public land and resources in BLM's San Juan and portions of the Uncompahgre Basin resource areas, covering the southwestern corner of Colorado and portions of New Mexico and Utah. In the future, the BLM plans to have the San Juan Resource Area (SJRA) office manage all these public lands; thus, they were incorporated into this planning area so that this RMP will cover one resource area.

The contents of this plan are focused on resolving nine key issues that were developed with public input in 1983 (see Issues and Criteria, p. 1-3). In addition, several statutory or court-ordered requirements will be met when the decisions proposed in this plan are approved. As required under Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA), this document analyzes preliminary wilderness suitability recommendations for eight Wilderness Study Areas (WSAs). For these WSAs only, the RMP will preliminarily recommend whether they are suitable or nonsuitable for inclusion in the National Wilderness Preservation System (NWPS). These recommendations will be reported through the Director of the BLM to the Secretary of the Interior and to the President. Designation of an area as wilderness can only be made by Congress.

This RMP/EIS also analyzes alternatives for livestock grazing on public land, as required under a court-ordered agreement based on a 1973 lawsuit filed against the BLM by the Natural Resource Defense Council (NRDC).

This planning action serves to consolidate and update land use planning guidance currently contained in three Management Framework Plans (MFPs) that were prepared in the BLM's Montrose District between 1971 and 1981. In some cases, the existing plans consist of partially completed documents that were never formally adopted by the BLM. Thus, for some portions of the planning area, this RMP will provide the first comprehensive management guidance to be approved by the BLM.

This document will address possible future management of the area for the next 10 or more years. When necessary, revisions will be completed on the RMP to keep it current with resource management needs and policies.

Setting

The planning area in southwestern Colorado considered in this RMP is comprised of public lands in Montrose, Montezuma, La Plata, Dolores, Archuleta, San Juan, San Miguel, and Mesa counties in Colorado. In addition, parts of Rio Arriba County, New Mexico, and San Juan County, Utah, are contained in the planning area. The area contains approximately 994,000 acres of public land, with an additional 297,000 subsurface (mineral) acres. The vast majority of the public lands are contained in the northwest and southwest portions of the planning area. The land pattern strongly influences land management options. The population of the area is centered in the southern portion of the area (Cortez and Durango) away from the large block of public land.

The San Juan Resource Area has total multiple use planning responsibility for the New Mexico portion of the planning area. The portions of San Juan County, Utah, in the planning area are Cross and Squaw/Papoose canyons, two WSAs that are adjacent to Colorado's WSAs. Planning for these areas relates only to their suitability or nonsuitability for wilderness.

PURPOSE AND NEED

Planning Process

The BLM RMP process consists of nine basic actions. The planning actions described in the regulations and used in preparing this plan are described below.

Identifying the Issues

This step is intended to identify resource management concerns and needs and resource use, development, and protection opportunities for consideration in the RMP (completed in the summer of 1983).

Developing Planning Criteria

Planning criteria guides the development of the RMP. They ensure that the plan is tailored to the issues and that unnecessary data collection is avoided. They are generally based on applicable laws, policy, guidance from the BLM Director, and the results of public participation.

Inventory Data and Information Collection

Various kinds of issue-related data are collected to complete the process, accomplished through gathering field data and researching and analyzing existing data.

Analyzing the Management Situation

This step includes a description of current BLM management practices, a discussion of existing problems and opportunities for solving them, and a consolidation of existing data that are needed to analyze and resolve the identified issues.

Formulating the Alternatives

During this step, several complete, reasonable resource management alternatives are prepared, including one for no action and several that strive to resolve the issues while placing emphasis on either environmental protection or resource production.

Estimating Effects of Alternatives

The effects of implementing each alternative are estimated to allow a comparative analysis of impacts.

Selecting the Preferred Alternative

Based on the information generated during Step 6, the BLM District Manager identifies a preferred alternative. The draft RMP/EIS is then prepared and distributed for public review.

Selecting the RMP

Based on the results of public review and comment, the BLM District Manager will select a proposed RMP and it will be published along with a final EIS. A final decision is made after a thirty-day protest period on the final EIS.

Monitoring and Evaluating

This step involves collecting and analyzing resource data to determine the plan's effectiveness. Monitoring continues from the time the RMP is approved until changing conditions require a revision of all or part of the plan.

As a part of implementing the plan, BLM prepares site-specific activity plans for the various programs (range, cultural, etc.) that define specific objectives, projects and actions needed to manage a given area within the guidelines and objectives established in the RMP. These activity plans are often subjected to interagency reviews, additional environmental assessments, and(or) public reviews.

Issues and Criteria

Issue-Driven Planning

The BLM planning regulations generally equate land use planning with problem solving or issue resolution. An issue may be defined as an opportunity, conflict, or problem regarding the use or management of public lands and resources. Obviously not all issues are capable of resolution through land use planning but may instead require changes in policy, budgets, or legislation.

As a practical matter, issue-driven planning means that only those aspects of current management that are felt to be at issue are examined through formulating and evaluating alternatives. The nine issues addressed in this document were identified based on the judgment of planning team members, interagency consultation, public and State government input, and review by BLM managers. Table 1-1 discusses those nine issues (not listed in a priority order).

Table 1-1. Issues and Planning Criteria for the San Juan-San Miguel RMP.

Planning issue	Management objective	Needed decision	Planning criteria
Lands	Make public lands available for public needs.	Identify public lands unsuitable for major Rights-of-Way (ROW) corridors.	Unsuitable areas may include WSAs, some critical wildlife areas, significant scenic areas and coal deposits, and important cultural, recreation, and timber areas. Exceptions to the above may be allowed with proper analysis and mitigation.
	Identify tracts for possible future land actions.	Identify specific public lands for possible future sales, exchanges, or for Recreation and Public Purposes (R & PP).	Disposal criteria include: (1) meets community needs; (2) public land has physical capabilities to support desired action; (3) could other land meet needs; and (4) does public land have significant values (i.e., cultural, mining claims, etc.).
Mineral Development	Provide for mineral development.	Identify areas available for possible future coal leasing.	Criteria include: (1) coal reserves have high to medium development potential within a Known Recoverable Coal Resource Area (KRCRA); (2) areas should be screened against coal unsuitability criterion; (3) demand for coal should be considered, both present and potential; and (4) coal's compatibility with other surrounding land uses.
		Identify possible mitigating measures for areas of intense mineral activity.	Mitigating measures should: (1) limit or eliminate the impacts within reasonable environmental and economic limits; and (2) protect nationally significant resources from mineral development.
Vegetation Resources	Manage use within vegetation resource capacity on a sustained yield basis. Maintain or improve range condition and trend. Provide increased livestock forage to contribute to economic stability.	Identify kinds of livestock, levels of use, season-of-use, and locations of livestock use. Determine how many and where wild horses and necessary forage for a healthy herd will be managed.	Consideration will be given to: (1) capability of vegetation to sustain existing and future grazing uses; (2) intensifying management that is needed to benefit livestock, wildlife, wild horses, and vegetation; (3) needs of soil, watershed and vegetation; (4) demand for forage; (5) needs for vegetation treatments; (6) livestock industry's dependence on public land; (7) public's dependence on public land for wildlife-oriented recreation; (8) wildlife's dependence on public land; (9) public's dependence on and demand for forest products; and (10) forested lands' capability to sustain use.

Table 1-1. (continued)

Planning issue	Management objective	Needed decision	Planning criteria
Vegetation Resources (continued)		Implement management actions to protect riparian and aquatic resources and watershed values.	
		Identify management actions by allotment (i.e., range improvements, monitoring, etc.).	
		Identify management actions to improve wildlife habitat such as use levels, forage needs, wildlife introductions, etc.	
	Determine allowable harvest for timber and woodland species.	Determine productive forest areas to be managed.	
		Establish guidelines for timber and woodland disposal.	
Soils and Water	Improve or maintain water quality and quantity on public lands.	Identify sources of water pollution and measures that will be taken to improve water quality.	Water resource management should: (1) give priority to water quality problem areas; (2) consider cost and effectiveness of management actions for reducing degradation.
Cultural Resources	Determine management direction for important cultural sites and areas.	Identify cultural sites that will be developed, protected, or stabilized and interpreted for public use and research.	Consider: (1) the capability of site to sustain use; (2) need for additional management as well as for additional inventories in area; (3) accessibility for public use; and (4) availability of other sites on public or private lands.
		Determine special designations or management guidelines for cultural sites.	Consider: (1) need for protection not afforded under existing laws; and (2) other multiple use values and impacts to them.

Table 1-1. (continued)

Planning Issue	Management Objective	Needed Decision	Planning Criteria
Special Management Areas	Ensure availability of recreation opportunities.	Designate in the RMP lands that are open, closed, or limited to ORVs.	Consider: (1) types of resource damage and user conflicts between ORV uses and other resource values; (2) whether ORV limits or closures will resolve conflict; and (3) whether important wildlife, recreation, cultural, and wilderness values will be protected from ORV uses.
		Develop management guidelines for the Dolores River Canyon SRMA.	Consider: (1) The Wild and Scenic River study data; and (2) the implications of the McPhee Dam on future management direction.
		Develop management guidelines for the Silverton SRMA.	Management direction from Gunnison Basin and the American Flats-Silverton Management Framework Plan (1980) will be used as basis for future decisions.
		Identify other recreation management opportunities in area.	Consideration will include: (1) physical capability of land to support desired recreation activity; and (2) the availability of other public or private opportunities.
	Recognize need for protective measures (i.e., withdrawals, special designation, etc.).	Review existing Research Natural Area to see if still appropriate and determine need for new ACEC.	Review shall include: (1) consideration of important regional or national values for ACEC designation; and (2) manageability of the area; and (3) scarcity of the resource.
Wilderness Resources	Evaluate wilderness characteristics and management alternatives.	Identify which of the eight WSAs or portions suitable for inclusion in the NWPS and those areas not suitable for wilderness.	Evaluation should include: (1) BLM's wilderness study policies and guidelines with principal criteria being wilderness values and manageability; and (2) coordination of studies with other Federal, State, and local agencies.
		Identify alternative management for those areas not recommended as suitable.	Consider: (1) other resource values under principles of multiple use management; and (2) environmental impacts of nonwilderness management.

Table 1-1. (continued)

Planning issue	Management objective	Needed decision	Planning criteria
Fire	Provide direction that places increased emphasis on fire's role in the ecosystem.	Identify management to enhance fire program on public land to improve and enhance multiple use management opportunities.	Consider: (1) capability of land to improve through fire management; (2) protection of improvements on public and private land; (3) need to change vegetation communities to benefit resource values; and (4) using existing Paradox Limited Fire Suppression Plan as baseline data.
Access	Provide for public and administrative access.	Determine need for access for management of public lands.	Consider: (1) access to public land where physically and economically feasible; and (2) use of administrative access to protect fragile resources.

Source: BLM Data 1984.

CHAPTER ONE

ALTERNATIVES

INTRODUCTION

Four land use plan alternatives, including the BLM's Proposed Plan, are detailed in this chapter to provide readers and decisionmakers with a means of examining actions and resultant impacts. The four alternatives described are: Resource Conservation, Resource Utilization, Current Management, and the Proposed Plan.

A Draft Wilderness Technical Supplement to this RMP/EIS was also developed and discussed in more detail each WSA and their alternatives and individual resources, which include: All Wilderness, Wilderness Manageability, Conflict Resolution (Dolores River Canyon and McKenna Peak WSAs only), No Wilderness, and the Preferred Alternative.

Two subalternatives have also been developed to analyze the special problems associated with livestock grazing and wilderness; they are subalternatives to the Resource Conservation Alternative. The No Livestock Grazing Subalternative would involve eliminating livestock grazing from all public land in the resource areas. An Ecological Representation Subalternative was developed to display the different ecological systems and supplemental values represented by four of the WSAs, including Weber Mountain, Cross Canyon, McKenna Peak, and Dolores River Canyon WSAs, which would be recommended as suitable for designation as wilderness (using the Wilderness Manageability Alternative boundaries). (The Draft Wilderness Technical Supplement contains a detailed discussion of the Wilderness Manageability Alternative for each of these four WSAs.)

It is assumed that the plan will be implemented within 10 years from approval; this period is subject to adequate budget and staffing available to complete the tasks. Table 1-11 shows a summary of the four alternatives and their effects (categorized by resource).

Management Guidance Common to All Alternatives

The following management guidance is applied to and is a part of all alternatives considered and also provides background information explaining how this plan fits into other program actions such as coal leasing, livestock management, etc.

Soils, Water, and Air Program

Soils, water, and air resources will continue to be evaluated on case-by-case bases as a part of project level planning. Such an evaluation will consider the significance of the proposed projects and the sensitivity of soils, water, and air resources in the affected areas. Stipulations will be attached as appropriate to ensure compatibility of projects to soils, water, and air resource management. (Appendix Six shows an example of general Best Management Practices [BMPs].) Soils will be managed to maintain productivity and to minimize erosion.

Water quality will be maintained or improved in accordance with State and Federal laws and approved standards, including consultation with State agencies on proposed

projects that may significantly affect water quality. Management actions on public land within municipal watersheds will be designed to protect water quality and quantity. Management activities in aquatic and riparian areas will be designed to maintain or, where possible, improve riparian habitat condition. Roads and utility corridors will avoid aquatic and riparian areas to the extent practicable.

Air quality degradation is minimized through compliance with Federal, State, and local regulations and implementation plans. For example, air quality impacts from prescribed burns are limited by BLM Manual Section 7723 which describes Air Quality Maintenance Requirements and requires a State-approved open burning permit prior to implementation. Additional management activities include monitoring, analysis, and impact mitigation on a project-specific, case-by-case basis.

Energy and Minerals Program

The following principles will guide BLM in managing mineral resources on public lands (this has been updated per BLM Instruction Memorandum #84-568, dated June 28, 1984).

1. Except for Congressional withdrawals, public lands shall remain open and available for mineral exploration and development unless withdrawal or other administrative action is clearly justified in the national interest.

2. BLM actively encourages and facilitates the development by private industry of public land mineral resources so that national and local needs are satisfied and economically and environmentally sound exploration, extraction, and reclamation practices are provided.

3. BLM will process mineral patent applications, permits, operating plans, mineral exchanges, leases, and other use authorizations for public lands in a timely and efficient manner.

4. BLM's land use plans and multiple use management decisions will recognize that mineral exploration and development can occur concurrently or sequentially with other resource uses. BLM further recognizes that land use planning is a dynamic process and decisions will be updated as new data are evaluated.

5. Land use plans will reflect geologic, energy, and mineral values on public lands through more effective data assessment of those values.

6. BLM will monitor saleable and leasable mineral operations to ensure proper resource recovery and evaluation, production verification, diligence and inspection, and enforcement of the lease, sale, or permit terms. BLM will ensure receipt of fair market value for minerals commodities unless otherwise provided for by statute.

7. BLM will maintain effective professional, technical, and managerial personnel knowledgable in mineral exploration and development.

Oil and Gas Leasing. As a general rule, public land is available for oil and gas leasing. In many areas, oil and gas leases will be issued without lease stipulations.

In highly sensitive areas, where special stipulations or informtion notices are not sufficient to protect important surface resource values, no-surface occupancy stipulations or no leasing will be implemented. Examples of stipulations and information notices are located in Appendix Four. The various alternatives contain descriptions of the oil and gas leasing program.

When the commodity falls within a Known Geologic Structure (KGS), it is leased through competitive bidding. Areas outside of KGSs are leased noncompetitively.

Locatable Minerals. All public land is open to mineral entry and development unless previously withdrawn (i.e., wilderness, administrative withdrawals, etc.). Mineral exploration and development on public land will be regulated under 43 CFR 3800 to prevent unnecessary and undue degradation of the land.

Common Variety Mineral Materials. Applications for removing common variety mineral materials, including sand and gravel, will continue to be processed on a case-by-case basis. Stipulations to protect important surface values will be attached based on interdisciplinary review of each proposal.

Coal. The Federal coal leasing process is just beginning with this land use planning phase. Upon completing the plan, a site-specific activity plan for lease tracts will be developed. This site-specific data will be used in a regional coal EIS that will be developed to identify impacts and mitigations. Appendix Four contains examples of possible mitigating measures for coal leasing.

Coal Unsuitability Criteria and Surface Owner Consultation

BLM is required to review areas containing Federal coal to determine which lands are unsuitable for all or certain stipulated methods of coal mining. BLM procedures for assessing unsuitability are defined in the planning regulations (43 CFR 1601.6-6) and coal regulations (43 CFR 3461). The 20 criteria addressing unsuitability for the surface mining of coal were applied to the Nucla, East Cortez, and Durango Known Recoverable Coal Resource Areas (KRCRAs; see Tables 1-2-A and 1-2-B). The Nucla KRCRA includes 2,080 acres; East Cortez KRCRA, 2,840 acres; and Durango KRCRA, 143,780 acres (82,440 acres, BLM and 61,340 acres, U.S. Forest Service). The complete assessment report is available in the San Juan Resource Area Office.

Surface owners in the planning area, located along the coal outcrop from Durango to the Lemon-Vallecito area, were consulted for their preferences for or against surface mining on their lands where the Federal government holds the mineral estate (see Table 1-3).

The responses indicating opposition to surface mining expressed varying concerns, including water quality, maintaining the natural setting, other general environmental factors, and numerous private homes and subdivisions located over the mineral resources. More than 80 percent of surface owners contacted (in the Texas Creek, Bear Creek, Wilson Gulch, and Los Pinos River areas--all east of Durango) were opposed to surface mining of Federally-owned coal. Federal regulations require that, where a significant number of surface owners in an area have expressed a preference against mining those deposits by other than underground mining techniques, that area shall be considered acceptable for further consideration only for development by underground mining techniques. These areas will be considered as unsuitable for future surface mining due to surface owner preferences. The 2,120 acres involved here are all private surface/Federal minerals and surface mineable coal; they represent less than 1.4 percent of the Durango KRCRA.

Table 1-2-A. Unsuitability Criteria for Surface Coal Mining (Summary).

Criteria no.	Criteria name	Exception application	Unsuitable acres		
			Durango KRCRA	Nucla KRCRA	East Cortez KRCRA
1	Federal Land Systems	No			
2	Rights-of-Way	Yes			
3	Buffer Zones	Yes			
4	Wilderness	Yes	10,440		
5	Scenic Federal Lands	No			
6	Scientific Study Areas	No			
7	Cultural Resources	Yes			
8	Natural Areas	No			
9	Federally Endangered Species	Yes			160
10	State Endangered Species	Yes			
11	Eagle Nest Sites	Yes			
12	Eagle Concentration Areas	Yes			
13	Falcon Nest Sites	Yes			
14	Migratory Birds	Yes			
15	State Resident Fish & Wildlife	Yes			
16	Floodplains	Yes	1,240	280	
17	Municipal Watersheds	No			
18	National Resource Waters	No			
19	Alluvial Valley Floors	Yes	1,240*	280*	560
20	State Proposed Criteria	No			
	Surface Owner Consultation		1,720		
	Total unsuitable acres (with no duplication)		13,400	280	720
	Total acres in KRCRA		143,780	2,080	2,840
	Percent of total KRCRA		9	13	25

* Same acreage as shown in #16.
Source: BLM Data 1983.

Table 1-2-B. Areas Unsuitable for All Methods of Mining (Summary).

Criterion no.	Criterion name	Acreage Durango KRCRA	Nucla KRCRA	East Cortez KRCRA
4	Wilderness	10,440		
16	Floodplains		280	
19	Alluvial Valley Floors		280*	560
	Total acreages with no duplication	10,440	280	560
	Percent of total KRCRA	7	13	20

* Same acreage as shown in #16.
Source: BLM Data 1983.

Table 1-3. Surface Owner Preference for Coal Leasing in Planning Area.

	Number of responses	Percent of total responses
Against leasing	37	59
In favor of leasing	9	14
No response	17	27

Source: BLM Data 1984.

ALTERNATIVES--MANAGEMENT GUIDANCE

Lands Program

Land Ownership Adjustments. Public land will be made available for land sales or exchanges or both. Disposal of the public lands may be accomplished by sale, exchange, State Indemnity Selection, or title transfer pursuant to any applicable Federal authority. Transfers to other public agencies will be considered where management efficiency would result. Minor adjustments involving sales or exchanges or both may be permitted based on specifically applying the criteria for land ownership adjustments.

The criteria for land ownership adjustments will be considered in land reports and environmental assessments prepared for specific adjustment proposals. This list represents the major factors to be evaluated; they include threatened and endangered and sensitive species habitat; wetland and riparian areas; fisheries; nesting and breeding habitat for critical wildlife animals; key big game habitats (seasonal); developed recreation sites and recreation access sites; municipal watersheds; energy and potential for minerals; sites that are eligible for inclusion on the National Register of Historic Places; legal land surveys, wilderness and areas being studied for designation as wilderness; and other statutorily authorized designations.

Other factors include how accessible the land is for public uses; the amount of public investments in facilities or improvements and the potential for recovering those investments; difficulty or cost of administration; how suitable the land is for management by another Federal agency; how significant the decision is in stabilizing local business, social and economic conditions, and lifestyles; authorized land users, including Recreation and Public Purposes (R & PP) leases, withdrawals, or other leases or permits.

Two more factors are: (1) how consistent the decision is with cooperative agreements and plans of other agencies, and (2) suitability and need for change in land ownership including community expansion or economic development, such as industrial, residential, or agricultural (other than grazing) development.

Certain parcels of public land will be considered for sale or exchange or title transfer when (1) the lands are determined to be not needed for a Federal project or a resource management activity; (2) retention of the lands is not in the national interest; or (3) the lands are not cost efficient under BLM management.

Land Laws and Policies. The lands program in the planning area is primarily concerned with the authorization of uses on the public lands by others, including private parties, state, county, and other Federal agencies. The objective is to insure compatibility of the various multiple uses and environmental protection of resources.

New Withdrawals. Process new withdrawals on a case-by-case basis, using existing guidance to determine if formal withdrawal is needed.

Withdrawal Review. Reviewing other agency withdrawals that will be continued, modified, or revoked will be completed by 1991. Upon revocation or modification, part or all of the withdrawn land will revert to BLM management. Current BLM policy is to minimize the acreage of public land withdrawn from mining and mineral leasing, and, where applicable, to replace existing withdrawals with ROWs, leases, permits, or cooperative agreements.

Utility and Transportation Corridors. All public land is generally available for utility and transportation corridor development; exceptions will be based on considering the criteria listed below. Applicants will be encouraged to locate new facilities within existing corridors to the greatest extent possible. Public land within areas identified as unsuitable will not be available for utility and transportation corridor development (see Table 1-1). Exceptions may be permitted based on considering: types of and needs for proposed facilities; conflicts with other resource values and uses, including potential values and uses; and availability of alternative and(or) mitigation measures.

Access. BLM will make every reasonable effort to provide primary access (also meeting county standards) to private landowners (via Title V Rights-of-Way) when such access will not cause significant, adverse impacts to other resources. However, BLM will not grant additional rights-of-way when suitable access already exists unless there is a compelling public need.

When a number of potential landowners could benefit from access across the public lands, counties and private developers will be encouraged to develop public access in such areas.

Recreation Program

General. A wide range of outdoor recreation opportunities will continue to be provided for all segments of the public, commensurate with demand. Trails and other means of public access will continue to be maintained and developed where necessary to enhance recreation opportunities and allow public use. Developed recreation facilities receiving the heaviest use will receive first priority for operational and maintenance funds. Sites that cannot be maintained to acceptable health and safety standards will be closed until deficiencies are corrected.

Recreation opportunities will continue to be evaluated on a case-by-case basis as a part of project level planning. Such evaluation will consider the significance of the proposed project and the sensitivity of recreation resources in the affected area. Stipulations will be attached as appropriate to assure that activities are compatible with recreation management objectives.

Travel Planning and Motorized Vehicle Use. Travel planning, including the designation of areas open, limited, and closed to motorized vehicle access, will remain a priority for public land. Public land within areas identified as open to motorized vehicle use generally will remain available for such use subject to existing laws and regulations. Public land within areas identified as limited to motorized vehicle use generally will receive priority attention during travel planning. Major limited categories include: number and types of vehicles, time or season of vehicle use, permitted or licensed use only, areas limited except for existing (or designated) roads (or ways) and trails, and other limitations as needed by management objectives.

Public land within areas identified as closed to motorized vehicle use will be closed yearlong to all forms of motorized vehicle use. Exceptions may be allowed in WSAs based on applying BLM's Interim Management Policy (BLM Revised, July 12, 1983).

Visual Resources

In addition to specific areas identified in the plan alternatives, visual resources will continue to be evaluated as a part of activity and project planning; this evaluation will consider the significance of the proposed projects and their visual impact to the landscape. Stipulations will be implemented to assure that projects are compatible with management objectives established in the RMP (see Appendix Two in the Draft RMP).

Cultural Resources

In addition to specific areas identified in the plan alternatives, cultural resources will continue to be inventoried and evaluated as part of project level planning. Recommendations will be generated from the evaluations and will consider all impacts to the proposed projects and the important cultural resources in the affected areas. Stipulations will be attached to assure that projects are compatible with management objectives for cultural resources. Avoidance will continue to be the primary measure used.

Wilderness Resources

WSAs will continue to be managed in compliance with BLM's Interim Management Policy (BLM Revised July 12, 1983) until they are reviewed and acted upon by Congress. Areas being studied for wilderness will be managed to meet the nonimpairment standard. In cases where valid existing rights occur, areas will be managed to prevent unnecessary and undue degradation of the land.

Public land within areas added by Congress to the NWPS will be managed in compliance with BLM's Wilderness Management Policy and the Wilderness Act of 1964. Site-specific wilderness management plans will be developed for such areas within two years after designation by Congress. Areas reviewed by Congress but not added to the NWPS will be managed in accordance with applicable guidance provided by this RMP.

Forestry

Public land within high priority forest management areas will be available for a full range of forest management activities. Major forest activity plans generally will be required prior to initiating those activities in such areas. Pending completion of the activity plan, timber and woodland stand treatments will be evaluated by an environmental assessment and implemented on a case-by-case basis.

Forested areas within other emphasis areas will also be available for a full range of forest management activities; plans will be modified to be compatible with the management emphasis areas. Firewood harvesting will be permitted on most accessible forest land that is available for harvesting forest products.

Range

General. The planning area is a complex ecosystem composed of plant and animal communities and basic soil types, all responsive in one way or another to natural processes such as rain, wind, sunlight, and man's activities. No single element in the range ecosystem is so readily managed and with such far-reaching effects as is vegetation.

Consequently, maintaining or improving the vegetation component of this ecosystem is the key to enhancing the resource values of the planning area to permit a balanced mix of uses to ensure sustained yield. The components of the rangeland program are familiar ones; they have been part of the program for some years. The main emphasis of the range program is considered in the following components:

Allotment Categorization. All grazing allotments in the planning area have been assigned to one of three management categories based on present conditions, potential for improvement, whether other resource conflicts exist, and what opportunities exist for positive economic return on public investments (see Appendix Eight). The management category for an allotment may be changed after the RMP/EIS is completed, when resource conditions change, or when new data become available.

The "M" category allotments generally will be managed to maintain current satisfactory resource conditions; "I" allotments generally will be managed to improve resource conditions; and "C" allotments will receive custodial management to prevent resource deterioration.

Allotment-Specific Management Actions for the Improvement ("I") Category. Multiple use management actions have been developed for each allotment in the "I" category (see Appendix Nine-A in the Draft RMP). Future management actions, including developing AMPs, will be tailored to meet these objectives. However, the priorities assigned to achieving objectives for wildlife habitat, watershed, vegetation condition, and livestock forage production differ between alternatives.

Allotment Management Plans (AMPs). Implementing the recommended actions for the planning area is guided by a series of functional activity plans, which include Herd Area Management Plans for wild horses, HMPs for wildlife, and AMPs for livestock grazing. Each plan explicitly details planned programs and management actions designed to accomplish proper land and resource management for the full mix of public uses. Specifically, AMPs, prepared in consultation, cooperation, and coordination with the operator or other affected interests, are documents which prescribe the manner in and extent to which livestock grazing is conducted and managed to meet multiple use, sustained yield, economic and other needs and objectives as determined through the land use plan.

Monitoring. Initial stocking rates are based upon the best data currently available. Closely monitoring grazing systems and progressing toward improvement are needed for BLM to be able to make periodic adjustments. A monitoring program will be established in the planning area to determine whether the goals and objectives of the RMP are being achieved by the management systems. When undesirable and unintended changes in resource values are discovered and the causes are determined, corrective action will be taken. BLM Instruction Memorandums WO-82-292 and WO-82-650 discuss the applications of rangeland monitoring in more detail.

Livestock Use Adjustments. Livestock use adjustments are most often made by changing one or more of the following: the kind or class of livestock grazing the allotment, the season of use, the stocking rate, or the grazing pattern. For each of the four alternatives presented in this RMP, initial and potential carrying capacities have been estimated for each allotment; see Appendix Nine-E in the Draft RMP, which also notes where adjustments in the season of use and the class or kind of livestock may be needed. While most livestock use adjustments will occur in the "I" allotments, use adjustments are permitted for allotments in "C" and "M" categories.

In reviewing the estimated initial carrying capacities and other recommended changes, it is emphasized that the proposed AUM figures are not final stocking rates. Rather, all livestock use adjustments will be implemented through documented mutual agreement or by decision. When adjustments are made through mutual agreement, they may be implemented once the Rangeland Program Summary has been through a public review period. When livestock use adjustments are implemented by decision, it will be based on operator consultation, range survey data, and resource condition monitoring. Current BLM policy emphasizes the use of a systematic monitoring program to verify the need for livestock adjustments proposed on the basis of one-time inventory data.

The Federal regulations that govern changes in allocation of livestock forage provide specific direction for livestock use adjustments implemented by decision (43 CFR 4110.3-1 and 43 CFR 4110.3-2). The regulations specify that permanent increases in livestock forage "shall be implemented over a period not to exceed five years...," and that decreases in livestock forage "shall be implemented over a five year period...." The regulations do provide for decreases to be implemented in less than five years when: (1) the downward adjustment is 15 percent or less of the "authorized active grazing use for the previous year"; (2) an agreement is reached to implement the adjustment in less than five years; or (3) a shorter implementation period is needed to sustain resource productivity.

If data acceptable to the BLM Area Manager are available, an initial reduction shall be taken on the effective date of the decision. The balance of the reductions would be taken in the third and fifth years following the effective date of the decision. If data are not available to support the initial reduction, a decision will be issued identifying the data needed and procedures to be used for arriving at the adjustments. Adjustments based on the additional data shall be implemented by a decision that will initiate the 5-year implementation period.

Range Improvements. Typical range improvements and the general procedures to be followed in implementing them are described in Appendix Nine-F in the Draft RMP. The extent, location, and timing of such actions will be based on the allotment-specific management objectives adopted through the AMP process, interdisciplinary development and review of proposed actions, contributions from operators and others, and BLM funding capability.

All allotments in which range improvement funds are to be spent will be subjected to an economic analysis, which will be used to develop a final priority ranking of allotments to commit the range improvement funds that are needed to implement activity plans. The highest priority for implementation generally will be assigned to those improvements for which the total anticipated benefits exceed costs.

Grazing Systems. Types of system to be implemented will be developed in cooperation with the livestock operator and based on considering the following factors: allotment-specific management actions (see Appendix Nine-D and Nine-I-1 in the Draft RMP); resource characteristics, including vegetation potential and water availability; general management actions (see Appendix Nine-D in the Draft RMP); operators needs; and implementations costs. Typical grazing systems available for consideration are described in Appendix Nine-C in the Draft RMP.

Unallotted Tracts. Unallotted tracts generally will remain available for further consideration for authorized grazing, as provided for in the BLM grazing regulations (43 CFR 4110 and 43 CFR 4130). However, certain tracts not currently authorized for grazing use will remain unallotted.

Wildlife and Fisheries

General. Fish and wildlife habitat will continue to be evaluated on a case-by-case basis as a part of project level planning. Such evaluation will consider the significance of the proposed project and the sensitivity of fish and wildlife habitat in the affected area. Stipulations will be attached as appropriate to assure that projects are compatible with management objectives established in the RMP for fish and wildlife habitat. Habitat improvement projects will be implemented where necessary to stabilize and(or) improve unsatisfactory or declining habitat condition. Such projects will be identified through HMPs or coordinated resource management activity plans.

Seasonal Restrictions. Seasonal restrictions will continue to be applied where they are needed to mitigate the impacts of human activities on important seasonal wildlife habitat. The major types of seasonal wildlife habitat and the time periods when restrictions may be needed are shown in Table 1-4.

Threatened, Endangered, and Sensitive Species Habitat. No activities will be permitted in threatened, endangered, and sensitive species habitat that would jeopardize their continued existence.

The Colorado Division of Wildlife (CDOW) and the U.S. Fish and Wildlife Service (USFWS) will be consulted prior to implementing projects that may affect threatened and endangered species' habitat. If such a situation is determined through the BLM biologic assessment process, then consultation with the USFWS will be initiated as per Section 7 of the Endangered Species Act of 1973, as amended.

Terrestrial Wildlife Habitat. Sufficient forage and cover will be provided for wildlife on their seasonal habitat. Forage and cover requirements will be incorporated into AMPs and will be specific to primary wildlife use areas. Generally, range improvements will be designed to achieve both wildlife and range objectives.

Table 1-4. Seasonal Wildlife Restrictions.

Habitat	Restricted period
Elk and mule deer winter range	12/1 - 4/15
Elk calving grounds	5/1 - 7/15
Eagles' winter concentration area	12/1 - 4/15
Sage grouse strutting grounds	3/15 - 5/15

Source: BLM Data 1984.

Aquatic and Riparian Habitat. Objectives to protect or improve aquatic and riparian habitat will become part of AMPs and HMPs. Management actions within flood plains and wetlands will include measures to preserve, protect, and, if necessary, restore their natural functions (as required by Executive Orders 11988 and 11990). Management techniques will be used to minimize degrading aquatic and riparian habitat. Bridges and culvert installations will be designed to maintain adequate passages for fish. Wildlife reintroductions and fish stocking proposals will be evaluated and recommendations will be made to the CDOW.

Cadastral Survey

Cadastral surveys will continue to be conducted in support of resource management programs. Survey requirements and priorities will be determined on a yearly basis as a part of the annual work planning process.

Fire Management

Until the Normal Year Fire Plan is updated, the primary fire protection objective will continue to be the control of all wildfires on or threatening public land during the first burning period. The modified suppression area in the northern part of the planning area will be continued. Expanding the modified suppression areas will be considered and evaluated when the Normal Year Fire Plan is reviewed. Prescribed burning will continue to be used in support of resource management objectives. The fire management plans developed for the eight WSAs within the planning area will continue to be used as management direction. All fire plans are available in the BLM's Montrose District Office.

Road and Trail Construction and Maintenance

Road and trail construction and maintenance will continue to be conducted in support of resource management objectives. Construction and maintenance requirements and priorities will be determined on a yearly basis as a part of the annual work planning process.

Investment of public funds for road and trail construction generally will be permitted only on land identified for retention in public ownership. Exceptions may be allowed where investment costs can be recovered as a part of land disposal actions.

Specific road and trail construction standards will be determined based on resource management needs; user safety; impacts to environmental values, including but not limited to wildlife and fisheries habitat, soil stability, recreation, and scenery; and construction and maintenance costs.

Management Direction

Management direction for the planning area is defined through the use of multiple use emphasis areas consisting of descriptions for specific management areas shown on the alternative maps in the DEIS and explained in Appendix Five. These descriptions contain multiple use management direction specifying which activities will be stressed to achieve goals and objectives. Specific activities allowed and prohibited will be specified for each multiple use emphasis area, which remains constant throughout the alternative. The emphasis areas are applied to different locations in the planning area under the alternatives. Management direction contained in the multiple use emphasis areas will be applied to the specific areas shown on the alternative maps in the DEIS. The specific multiple

use emphasis areas were developed to respond to planning issues and resource needs. The following narrative contains a discussion of the emphasis areas, followed by a description of the alternatives describing the overall management that would result from applying the multiple use emphasis areas in that particular alternative.

Emphasis Area A--Livestock Management. Management direction will emphasize increasing forage and livestock production on a sustained yield basis. Emphasis is upon increasing forage, red meat and animal fiber production and improving forage composition and watershed conditions. Significant investments will be made in range improvements which will be multiple use oriented (i.e., wildlife, watershed, etc.). Investments for other resources will be minimal, although resource management activities compatible with livestock production will continue. Dispersed recreation opportunities will continue. Woodland products and timber will be made available. Wildlife habitat development generally will not be emphasized. Fire will be used to enhance forage production.

Emphasis Area B--Wildlife. Management direction will emphasize achieving and maintaining the best possible habitat conditions for fisheries and wildlife. Emphasis will be upon increasing aquatic and terrestrial wildlife habitat capability, improving stream and watershed conditions and providing a high degree of vegetation diversity. Investments for wildlife habitat improvements could be high in certain areas. Woodland products and timber will be available and dispersed recreation opportunities will continue. Livestock management will be of an intensity to utilize available forage and maintain forage vigor while not degrading wildlife habitat. The number or season-of-use for livestock may be reduced in some areas.

Emphasis Area C--Recreation. BLM's recreation program is structured to the intensity and type of recreation management required. There are two primary types of recreation management situations which are recognized and which guide the direction of management emphasis in the RMP area. The first, Special Recreation Management Areas (SRMAs), occurs where recreation is defined and recognized as the principal management objective. The second situation, Extensive Recreation Management Areas (ERMAs), occurs where recreation is not the principal management objective but may be an issue or concern of some significance in multiple use management for the area. This is consistent with BLM's role in accommodating the dispersed, largely unstructured recreation that typifies the large expanses of public land in the planning area.

The primary management goal is to ensure the continued availability of outdoor recreation opportunities which the public seek and which are not readily available from other public or private entities. Secondary goals include protecting resources, meeting legal requirements for visitor health and safety, and mitigating resource user conflicts involving recreation.

Recreation objectives are to provide dispersed and resource-dependent types of recreation opportunities such as cross-country skiing, hunting, hiking, boating, jeeping, and fishing and to deal with the limited number of situations which require special or more intensive types of recreation management. Investments will be concentrated in SRMAs and in those ERMAs where recreation program goals apply. Management objectives would include major investments in facilities and visitor management. Where recreation is not the principal management objective, management direction will largely emphasize the provision of access and visitor information and protecting site resources from user damage.

Emphasis Area D--Wilderness. Management direction will allow for wilderness management in accordance with the Wilderness Act of 1964 (78 Stat. 890; 16 USC 1131-1136). The objective of management is to provide predominantly untrammeled, natural environments for the physical, biologic and social components of wilderness. The physical and biologic components are managed so that natural processes are unimpeded by human activities or use. Natural processes, including naturally occurring fire, soil erosion and insect and disease cycles, proceed essentially unrestricted by man. Emphasize high levels of solitude, few party encounters, and high opportunities for challenge, risk, and self-reliance. Human travel is cross country or by use of a trail system. Recreation use will be consistent with management of wilderness resources or it will be restricted or prohibited when or where needed.

Emphasis Area E--Mineral Development. Management direction will emphasize mineral development on the public lands. Mineral values indicate that significant reserves of valuable minerals are present and that development is either currently ongoing or will occur within the near future. Other resource uses will occur to the extent that they are compatible with the mineral development. Limited expenditures of public resources will be used in developing the present land resources. Livestock grazing will continue, wildlife habitat will be maintained where feasible, and cultural resources will receive the protection currently afforded by law.

Emphasis Area F--Cultural Resources. Management direction will emphasize the preservation, management, and use of the cultural resource properties found within the area. Emphasis will be on protecting the soils, vegetation and wildlife resources to enhance the natural environment of the area and hence the cultural resources setting. Mineral resources will be developed while constrained by existing laws, policy and regulations pertaining to cultural resources. Other resource and land management activities will be constrained to avoid conflict with objectives for preservation, protection, and development.

Emphasis Area G--General Natural Resource Management. Management direction for these areas will consist of general multiple use as prescribed in FLPMA (1976). The resource values contained in these areas are not significant to the degree that a dominant use exists. Management guidance will consist of existing laws, policy, and manuals concerning each resource program.

Emphasis Area H--Public Land Disposal. Management of these areas will be for the disposal of the public lands; these areas will be subjected to additional screening and clearances before any tracts identified for disposal in this plan may be transferred from BLM control. These activities include mineral assessment, cultural resource clearances, environmental analysis, appraisal and similar site-specific actions. Little or no public funds will be spent upon these tracts for resource management; funds would only be spent to correct public health and safety problems or to correct severe resource conditions that cannot be allowed to continue.

Emphasis Area I--Wild Horses. Management direction will emphasize managing the wild horse herds present on public land by providing necessary forage and water. Some investments would probably occur to enhance the habitat for the horses and also to reduce conflicts with other uses in the area. Wild horse management plans will be developed. Reducing livestock and possibly wildlife may need to occur to maintain forage production and vigor. Dispersed recreation, including wild horse viewing, will continue. Woodland products will be made available on a limited basis. Fire will be used to enhance forage production.

Emphasis Area J--Forestry and Wood Products. This emphasis is designed to increase the production and utilization of wood fiber, firewood, post and poles. Emphasis is upon improved wood production and utilization resulting from extensive modification of tree and other vegetation cover. Investments will be made for forest management activities. Investments in other emphasis areas that are commensurate with wood fiber production will be made. Opportunities will generally be moderate for wildlife management and for dispersed recreation. Livestock grazing will occur; however, disruptions may occur due to timber management actions or objectives.

Emphasis Area K--Soils and Water. Management direction will emphasize improving water quality and soil stability. Resource data indicate that significant water quality problems exist in some areas and management action may improve the existing situation. In addition, soil erosion or fragile soils exist that are in need of more intensive management. Other resource uses will occur to the extent that they are compatible with the soils and water program direction for the specific areas. Uses by surface-disturbing activities may be limited or denied to improve resource conditions. Livestock grazing will be allowed but possibly at a reduced level; ORV use would be limited or excluded. Other resources, such as wildlife, cultural, etc., would be protected or enhanced under this emphasis area.

Emphasis Area L--Area of Critical Environmental Concern (ACEC). Management direction will emphasize the areas of public land where special management attention is required to protect from natural hazards such as erosion, fire, and weather: (1) important historic, cultural, and scenic values, and fish and wildlife resources and (2) human life and property. The guidance will provide special management attention that will protect important environmental resources and human life and property from those natural hazards. This management should be completed without unnecessarily or unreasonably restricting public land users from purposes that are compatible with such protection.

ALTERNATIVES CONSIDERED IN DETAIL

INTRODUCTION

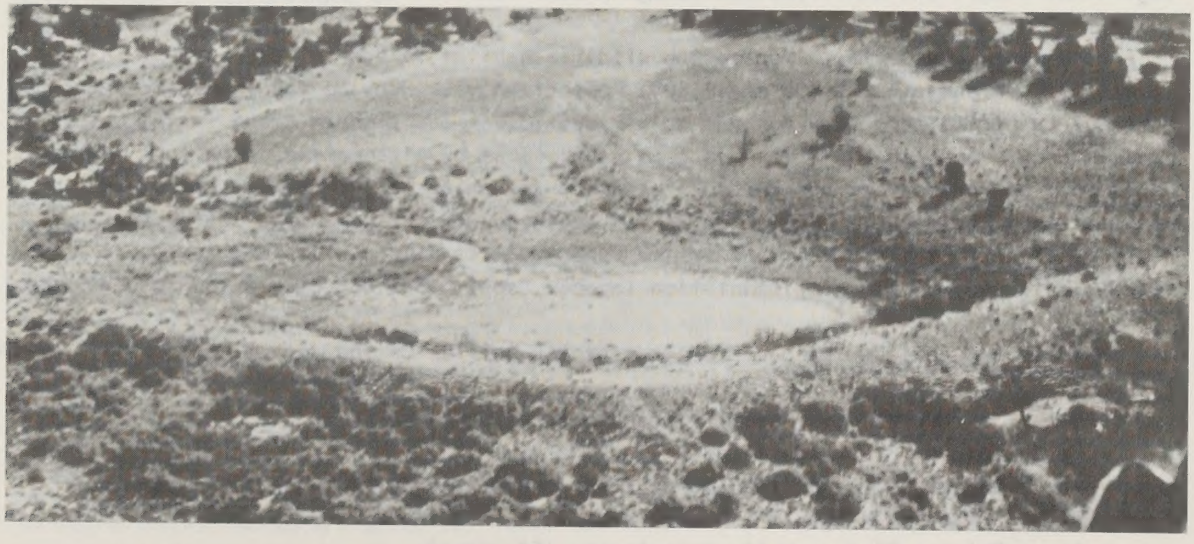
Four alternatives are considered in detail in Chapter One. Three of them--Current Management (no action), Resource Conservation, and Resource Utilization--were developed to explore a reasonable range of alternatives. The fourth alternative--the Proposed Plan, incorporates portions of the Current Management, Resource Conservation, and Resource Utilization alternatives, and generally represents a balanced approach to resource management. These alternatives were developed as multiple use alternatives and are realistic, implementable and comply with CEQ and BLM planning regulations.

Resource Conservation Alternative

Theme

This ecologically preferred alternative provides management direction to enhance nonconsumptive natural resource values. Multiple resource uses will continue in most areas; however, some areas may allow limited use or may be closed to specific resource uses, such as mineral development or access through sensitive wildlife areas. Projects which enhance resource values such as improving wildlife and riparian areas would receive priority. The following discussion describes the overall management that would result from implementing this alternative.

Livestock Management. Revise existing and develop new AMPs on 53 priority allotments (694,000 acres; see Appendix Nine-E in the Draft RMP). Less intensive management will occur on remaining allotments. Range improvements (approx. $430,000 for implementation over a ten-year period; see Table 1-5) should be developed which include 47 miles of fence, 117 new water developments, and 6,700 acres of vegetation treatment (6,500 acres is maintenance of existing land treatments). These AMPs would generally be developed on the well-blocked public lands in the western and northern portions of the planning area.



BLM STOCK POND IN UPPER DISAPPOINTMENT VALLEY.

RESOURCE CONSERVATION ALTERNATIVE

Table 1-5. Estimated Range Improvements/Costs.

Type of treatment (future)	Resource conservation	Resource utilization	Current management (no action)	Preferred
Fence to be built (mi)	47	80	0	77
Stock ponds to be built (no.)	99	129	0	129
Springs to be developed (no.)	10	10	0	10
Windmills to be installed (no.)	8	9	0	7
Vegetation treatments (ac)	200	14,400	0	10,100
Prescribed burn (ac)	0	2,300	0	2,000
Seeded (ac)	0	12,300	0	10,000
Existing treatments to be maintained (ac)	6,500	23,800	7,900	18,000
Total initial cost for all improvements	$430,000	$1.5 million	$200,000	$1.0 million

Source: BLM Data 1984.

Available forage in Animal Unit Months (AUMs) for livestock grazing would decrease initially by 45 percent (29,062 AUMs) and would be projected to decrease by 33 percent (to 43,160 AUMs) from current active preference in the long term under this alternative. These target livestock use levels may be adjusted in the future to reflect new resource information gathered by monitoring or other studies. Consultation with livestock operators before final decisions are issued will determine whether individual adjustments need to be phased in over a five-year period or whether such adjustments can be fully implemented in the first year. "I" category allotments will be given a priority for future investments in range improvements and monitoring. Allotments with the greatest potential for improvements of aquatic and(or) terrestrial wildlife habitat, watershed, and vegetation conditions and livestock forage production will be implemented first.

Wildlife--Terrestrial. Manage the wildlife habitat to support current population levels of deer and elk (20,000 and 1,600, respectively). Provide for increased pronghorn antelope use (300) and allow for the reintroduction of 300 bighorn sheep in the Dolores River Canyon. See Table 1-6 for big game populations by alternative. Continue present management of Perins Peak and Paradox peregrine falcon eyries. Provide protective stipulation to bald eagle roosts and winter eagle concentration areas. Allow for the reintroduction of the river otters in the Upper Dolores River. Complete necessary improvements and HMPs for implementation (approx. cost, $358,000 over a ten-year period).

Wildlife--Aquatic. Improve aquatic/riparian habitat on the following priority areas:

- Upper San Miguel River and its tributaries (39 miles)
- Upper Dolores River (11 miles)
- Lower San Miguel River and its tributaries (67 miles)
- Animas River drainage (24 miles)
- Lower Dolores River and its tributaries (53 miles)
- Southwest quadrant streams (55 miles)

RESOURCE CONSERVATION ALTERNATIVE

Develop needed HMPs and improvements for these six areas (including monitoring plans). Estimated costs for implementing habitat improvements over a 10-year period will be approximately $473,000 for approximately 249 stream miles (see Table 1-7).

Table 1-6. Estimated Big Game Populations By Alternative.

	Current	Resource conservation	Resource utilization	Preferred
Bighorn sheep	0	300	500	300
Elk	1,600	1,600	3,000	1,600
Mule deer	20,000	20,000	24,000	20,000
Pronghorn antelope	175	300	500	300

Source: BLM Data 1984.

Table 1-7. Estimated Terrestrial and Aquatic and Riparian Wildlife Improvements (Summary).

Type of treatment (future construction)	Current management	Resource conservation	Resource utilization	Preferred
Fence to be constructed (mi)	0	8	0	8
Erosion control structures (no. of gabions)	0	300	140	300
Water conservation structures (no. of guzzlers)	0	10	30	30
Stock ponds (no.)	0	25	0	0
Mechanical treatments (ac)	2,400	2,600	14,000	4,100
Prescribed burn (ac)	3,000	2,000	10,900	3,800
Seeded (ac)	4,100	5,700	17,700	7,800
Aquatic/riparian improvements (mi)	0	249	395	94

Source: BLM Data 1984.

Recreation. Continue management of the Silverton SRMA. Management emphasis will be directed toward managing recreation resources toward the resource-dependent end of the Recreation Opportunity Spectrum (ROS; see Appendix Three). The area will be managed for primitive, semiprimitive nonmotorized, and semiprimitive motorized recreation

opportunities. Typical facilities might include interpretive and directional signing. Continue ORV management as per existing American Flats/Silverton ORV plan (see Table I-8, ORV limitations by each alternative). Develop and implement a Recreation Area Management Plan for the Silverton SRMA that outlines specific needs for visitor management and facilities.

Manage the Dolores River Canyon as an SRMA per classifications determined by the BLM's ROS system. Manage the Dolores River from Bradfield Bridge to Dove Creek pump station for its semiprimitive nonmotorized setting opportunities; from Dove Creek pump station to Disappointment Creek for its semiprimitive motorized setting opportunities; from Disappointment Creek to Gypsum Valley Bridge under a roaded, natural ROS setting; and from Gypsum Valley Bridge to Bedrock for its primitive values and opportunity settings. Develop a Recreation Area Management Plan for the river which outlines specific management goals, objectives and management facilities needed. Typical facilities will include parking areas, campsites, toilets, boat ramps, and informational signing.

Wilderness. Recommend as suitable for wilderness the following WSAs: Weber Mountain, 6,303 acres; Menefee Mountain, 7,129 acres; Cross Canyon, 12,742 acres; Cahone Canyon, 9,040 acres; Squaw/Papoose Canyon, 11,287 acres; McKenna Peak, 19,562 acres; Dolores River, 28,630 acres; and Tabeguache Creek, 7,908 acres. Develop wilderness management plans for each WSA following designation by Congress.

Acquire private lands (40 acres) and split estate minerals (120 acres) within the Menefee Mountain WSA. Acquire Section 36 (State of Colorado) in Weber Mountain WSA. Acquire private land or easements between Bedrock and the northern boundary of the Dolores River Canyon WSA to improve management of the WSA. Acquire Section 36 (State of Colorado) adjacent to McKenna Peak WSA. Close cherrystem roads and ways in the following WSAs: Tabeguache Creek, and Cahone, Squaw/Papoose, and Cross canyons.

Minerals. Continue oil and gas leasing subject to environmental stipulations. Lands open to development would be provided on approximately 1,155,000 acres; lands open to development with lease stipulations (no-surface occupancy) on approximately 32,000 acres; and closed to leasing on approximately 103,000 acres (see Table I-9).

Continue cooperative management to protect surface resources on the Department of Energy (DOE) uranium lease tracts. Continue to assist in the processing of mineral actions. Provide for necessary permits for sand and gravel. Provide protective stipulations to protect the unique fossils in the Placerville area. Approximately 34,000 acres (943 million available tons) in the Durango KRCRA would be available for further consideration for coal leasing. The East Cortez (30 million tons) and Nucla (35 million tons) KRCRAs would not be available for leasing.

Cultural Resources. Manage the Anasazi Heritage Center as a cultural resource focal point for BLM in southwestern Colorado (see Chapter Two, Important Cultural Sites or Areas for detailed description). Provide for cultural management of: Lowry, Dominguez-Escalante, and Cannonball ruins, McLean Basin Towers; Hamilton and Mockingbird mesas; Squaw/Papoose, East Rock, Sand and Bull canyons; Painted Hand Ruin and Petroglyphs; Lightning Tree Tower Group; Hanging Flume; Dolores Cave; Tabeguache Pueblo; and Indian Henry's Cabin. Cultural Resource Management Plans (CRMPs) should be developed to outline specific management objectives for each site and area. Provide protective oil and gas stipulations (no-surface occupancy) on Sand and East Rock canyons, Cannonball, Hovenweep buffer, Battle Rock, Easter Ruin, Seven Towers Ruin, Lowry and Dominguez-Escalante ruins,

Table 1-8. ORV Limitations by Alternative (by acreage). 1/

Limitation	Current management	Resource conservation	Resource utilization	Preferred
Open	941,180	798,843	811,942	782,139
Limited to Existing Roads and Trails				
Recreation				
Silverton SRMA	51,180	51,180	51,180	51,180
Cultural				
Mockingbird Mesa	--	5,327	5,327	5,327
Bull Canyon	--	5	5	5
Indian Henry's Cabin	--	160	160	160
Sand and East Rock canyons		5,880		5,880
Soils and Water				
Disappointment Valley	--	--	46,000	46,000
Subtotal	51,180	62,552	102,672	108,552
Closed				
Recreation				
Lemon-Vallecito Area	--	5,900	--	5,900
Dolores SRMA		22,464	42,820	22,464
Weber Mountain	--	--	--	4,680
Menefee Mountain	--	--	--	4,040
Wilderness				
All eight WSAs	--	102,601	--	28,539 2/
Cultural				
Cross Canyon	--	--	13,913 3/	13,913 3/
Cahone Canyon	--	--	9,498	9,498
Squaw/Papoose Canyon	--	--	8,415 3/	8,415 3/
Tabeguache Creek Canyon	--	--	3,100	3,100
Wildlife				
Perins Peak	1,640	1,640	1,640	1,640
Subtotal	1,640	132,605	79,386	103,309
Total	994,000	994,000	994,000	994,000

1/994,000 acres in San Juan Resource Area.
2/Specific to the Dolores River Canyon.
3/Does not include Utah portion of WSA.
Source: BLM Data 1984.

Table 1-9.

Summary of Oil and Gas Leasing (in acres).

Oil and Gas Leasing Management Areas	Current Management Alternative		Resource Conservation Alternative		Resource Utilization Alternative		Preferred Alternative	
	PV*	KGS*	PV	KGS	PV	KGS	PV	KGS
Lands open to development	1,063,800	182,840	992,274	163,140	1,048,455	181,080	1,027,186	169,190
Lands open to development with lease stipulations	34,720	2,800	23,065	8,920	51,545	8,920	44,275	20,810
Closed to leasing	1,480	4,360	84,661	17,940	0	0	28,539	0
Subtotal	1,100,000	190,000	1,100,000	190,000	1,100,000	190,000	1,100,000	190,000

* All of the planning area is either categorized as a KGS (Known Geologic Structure) or PV (Prospectively Valuable, see Glossary for definition) except approximately 51,000 acres in the Silverton area.

McLean Basin Towers, Lightning Tree Tower Group, and Painted Hand Petroglyphs. Withdraw from mineral entry and provide no-surface occupancy for oil and gas leasing on: Dolores Cave, Tabeguache Pueblo, Bull Canyon Rockshelter, Painted Hand Ruin, and Indian Henry's Cabin. Limit public access in Mockingbird Mesa; Bull, Sand and East Rock canyons; and Indian Henry's Cabin to foot or horse only and restrict vehicle access to authorized vehicles only.

Public Land Disposal. Dispose of approximately 18,000 acres (through sales, exchanges, or any other title transfer means) throughout the planning area as indicated on the Resource Conservation Alternative Map; this includes small, unmanageable, isolated parcels of land with limited public values scattered throughout the area.

Wild Horses. Intensively manage for 75 wild horses in the Spring Creek Basin. Manage for 50 horses in the Naturita Ridge area. Designate as horse ranges. Develop herd management plans and implement necessary range improvements.

Forestry and Wood Products. Provide for intensive timber management on approximately 7,930 acres. Estimated allowable harvest would be 4.7 million board feet (MMBF) per decade. An additional 35,170 acres would be managed to provide woodland products (firewood, posts, and poles, etc.). Estimated allowable harvest would be 5.3 MMBF (10,600 cords) per decade. Public land within set-aside areas (see Table 1-10) will not be available for planned forest product harvest.

Table 1-10. Forest Set-Aside Areas within Planning Area.

Forest set-asides	Resource conservation	Resource utilization	Current management	Preferred
Dolores River Canyon area	311	104	104	104
Lemon/Vallecito areas	2,965	--	--	140
Menefee/Weber Mountain areas	120	--	120	120
Silverton area	12,078	12,078	12,078	12,078
TPCC (nonsuitable) 1/	20,042	20,042	20,042	20,042

Woodland set-asides	Resource conservation	Resource utilization	Current management	Preferred
Dolores River Canyon area	370	370	--	370
Range/chaining	23,970	23,970	--	23,970
WSAs	5,809	--	--	--
Wildlife	1,152	--	--	--
WPCC (nonsuitable) 2/	530,344	530,344	--	530,344

1/TPCC = Timber Production Capability Classification.
2/WPCC = Woodland Production Capability Classification.
Source: BLM Data 1984.

Soils and Water. Provide protective management on 4,700 acres in Boulder Gulch watershed to protect water quality for Silverton's municipal water supply. Protect water quality in aquifers used for domestic and municipal purposes in the Dry Creek Basin and Tabeguache Creek watersheds.

Manage 78,000 acres in the following watersheds to reduce erosion and sediment yield: Disappointment, Gypsum, and Paradox valleys, Dry Creek Basin, Ross Fort Park, Broad Canyon, Mud Spring Draw, and Burn, Yellowjacket, Negro, Bridge, and Hovenweep canyons.

Manage 30,000 acres in Disappointment Valley and Yellowjacket Canyon to reduce salinity in the Colorado River system. Reclaim 20 pollution sources (from heavy metals) in the Upper Animas River drainage. Develop watershed management plans for all erosion and salinity areas detailing specific management goals and actions.

Two subalternatives were developed within the Resource Conservation Alternative, the No Grazing Subalternative and the Ecological Representation Subalternative. Management would be identical to the main alternative with some readily identifiable and specific expectations which are outlined below. The subalternatives were developed to analyze these management variations that would occur under this alternative.

No Grazing Subalternative. The No Grazing Subalternative would require eliminating livestock grazing from all public land in the San Juan/San Miguel planning area. Livestock grazing would be phased out on approximately 937,000 acres of public land, which includes 227 grazing allotments used by 176 permittees, with a total active preference of 64,232 AUMs. The vegetation production would be available for wildlife and watershed protection.

Vegetation Allocation and Monitoring. With all forage resources available to wildlife, in theory, unconstrained elk populations on BLM lands could expand to 12,000 wintering animals. Similarly, if deer populations were not constrained, the forage resource could support approximately 50,000 wintering deer.

To be more reasonable, it is assumed that deer and elk populations would remain at stable levels to meet CDOW and San Juan National Forest long-range goals (as outlined in the Proposed Plan for wildlife--20,000 deer and 1,600 elk). Bighorn sheep and pronghorn poulations would likewise be managed for 300 sheep and 300 pronghorn.

Exceeding these goals could severely affect private and National Forest lands. In addition to forage allocation, habitat condition studies would be implemented to monitor use. Data from habitat studies would be used to identify habitat degradation and to recommend reductions in wildlife or adjustments in management strategy.

Implementation Costs. An estimated 2,000 miles of boundary fences between BLM and adjacent land owners (not including isolated, intermingled tracts of private lands) would have to be constructed. BLM would have no control over the design of privately owned fences on State or private lands.

Existing interior fencing and cattleguards would likely have to be removed to allow unrestricted movements of wildlife. Various water sources, now being used by both wildlife and livestock, would not be maintained by the grazing permittees. No new range improvements would be constructed; however, constructing new or maintaining existing range improvements could be undertaken to benefit resource uses other than livestock grazing.

Livestock operators with investments in range improvements on public land would be entitled to remove projects through appropriate salvage rights (Public Law 94-579).

Livestock trailing across public land would continue to be authorized on a case-by-case basis. A major effort would be needed to control trespass. Eliminating livestock grazing from public lands within the RMP/EIS area would incur costs for both BLM and the livestock operators. An undetermined cost for payment of salvage rights for some range improvements which livestock operators have on public land would be incurred by BLM.

The largest cost associated with this alternative would be the construction of trespass control fences. Construction of fences could require an estimated investment of as much as $7 million (materials and labor) by livestock operators and/or BLM if all 2,000 miles of fence were constructed.

Ecological Representation Subalternative. The Ecological Representation Subalternative was developed to study the WSAs that are included in this RMP which contribute to expanding the diversity of the NWPS. In this subalternative, Cross Canyon, Dolores River Canyon, McKenna Peak, and Weber Mountain WSAs would be recommended suitable for wilderness designation (a total of 65,961 acres), using the Wilderness Manageability Alternative boundaries as described in the Draft Wilderness Technical Supplement. Cahone Canyon, Menefee Mountain, Squaw/Papoose Canyon, and Tabeguache Creek WSAs would be recommended nonsuitable for wilderness designation (a total of 35,364 acres); the proposed management of these areas is described under the Preferred Alternative in the Supplement.

This subalternative is based primarily on the classification system used during the U.S. Forest Service's RARE II Study, which uses the ecoregion and physiographic regions of the United States (as developed by R. G. Bailey and A. W. Kuchler). For the purposes of this RMP, an ecoregion describes a continuous geographic area over which the environmental complex, produced by climate, topography, and soil, is sufficiently uniform to permit development of characteristic types of ecologic associations. Ecoregions are combined with potential natural vegetation types (PNVs; i.e., pinyon-juniper woodland) and physiographic landforms (i.e., canyons, mountains, etc.) which are used to relate and differentiate between a unique or fairly commonplace ecosystem studied for possible inclusion into the NWPS (see Draft Wilderness Technical Supplement, Appendix Three-A, for detailed discussion).

In addition, the Ecological Representation Subalternative focuses on the supplemental values found within each of the WSAs. In some instances, it is the combination of a WSA's ecosystem and its unique supplemental values which would add significantly to diversity within the NWPS.

RESOURCE UTILIZATION ALTERNATIVE

Resource Utilization Alternative

Theme

The Resource Utilization Alternative emphasizes development and use of economic values, such as minerals, available on public land. Multiple uses would continue; however, resource values contributing to the local or regional economy would be favored. This alternative would favor mineral exploration and development, range utilization, and land exchanges or sales; projects relating to these uses would receive priority. The following discussion describes the overall management that would result from implementing this alternative.

Livestock Management. Revise existing and develop new AMPs on 109 allotments (850,000 acres; see Appendix Nine-E in the Draft RMP). Less intensive management will occur on the remaining allotments. Range improvements (approx. $1.5 million for implementation over a ten-year period) should be developed, which include 80 miles of fence, 148 new water developments, and 52,800 acres of vegetation treatments (23,800 acres of this includes maintaining existing land treatment).

Available AUMs for livestock grazing would initially reduce by 19,819 AUMs (31%) but would increase 29 percent from current active preference under this alternative. These target livestock use levels may be adjusted in the future to reflect new resource information gathered by monitoring or other studies. Consultation with livestock operators before final decisions are issued will determine whether individual adjustments need to be phased in over a five-year period or whether such adjustments can be fully implemented in the first year. All "I" and priority "M" category allotments will be given priority for investments in range improvements and monitoring.

Wildlife--Terrestrial. Manage the wildlife habitat to support increased populations of deer, elk, pronghorn antelope, and bighorn sheep (24,000 deer, 3,000 elk, 500 pronghorn antelope, and 500 bighorn sheep). Allow the reintroduction of bighorn sheep in the Dolores River Canyon. Continue present management of Perins Peak and Paradox peregrine falcon eyries. Provide protective stipulations to bald eagle roosts and winter eagle concentration areas. Allow for reestablishing river otters in the upper Dolores River. Complete necessary improvements and HMPs for implementation (approx. cost, $1 million over a ten-year period).

Wildlife--Aquatic. Improve aquatic and riparian habitat on the following areas (in priority order):

- Upper San Miguel River and its tributaries (54 miles)
- Upper Dolores River (52 miles)
- Lower San Miguel River and its tributaries (67 miles)
- Animas River drainage (24 miles)
- Lower Dolores River and its tributaries (143 miles)
- Southwest quadrant streams (55 miles)

Develop needed HMPs (including monitoring plans) for implementation (approx. cost, $1.26 million over a ten-year period).

Recreation. Continue management of the Silverton SRMA. Management emphasis will be directed more toward developing recreation opportunities in the facility-dependent end of

the ROS (see Appendix Three). Provide increased urban, rural, and roaded natural recreation opportunities and experiences. Continue ORV management as per existing mangement plan in American Flats/Silverton ORV plan (see Table 1-8). Develop and implement a Recreation Area Management Plan for the Silverton SRMA that outlines specific needs for visitor management facilities needed to encourage visitor use while not degrading the resources.

Manage the Dolores River Canyon as a SRMA as per classifications determined by BLM's ROS system. Manage the Dolores River (Bradfield Bridge to Dove Creek pump station) for its semiprimitive, nonmotorized recreation setting opportunities and from Dove Creek pump station to Disappointment Creek for its roaded, natural recreation opportunities. Also manage the river from Disappointment Creek to Gypsum Valley Bridge for its rural setting opportunities and from Gypsum Valley Bridge to Bedrock for its primitive opportunities. Develop a Recreation Area Management Plan for the river that outlines specific management goals, facilities, and objectives needed to encourage visitor use while not degrading the resource.

Wilderness. Under this alternative, none of the WSAs would be recommended as suitable for wilderness. Alternative land uses for the eight areas are summarized below:

WSA	Resource Emphasis
Cahone Canyon	Livestock, minerals (oil and gas), and cultural resources.
Cross Canyon	Livestock, minerals (oil and gas), cultural resources, and wildlife habitat.
Dolores River Canyon	Recreation and salinity control.
McKenna Peak	Livestock, wildlife, and soils and water.
Menefee Mountain	Minerals (coal, oil and gas), forestry, and wildlife.
Squaw/Papoose Canyon	Minerals (oil and gas, uranium and vanadium), cultural resources, and livestock.
Tabeguache Creek	Cultural resources and aquatic and riparian habitat.
Weber Mountain	Minerals (coal and oil and gas) and wildlife.

Minerals. Continue oil and gas leasing subject to environmental stipulations. Lands open to development without lease stipulations will be provided on approximately 1,229,000 acres, and lands open to development with lease stipulations (no-surface occupancy) on 61,000 acres.

Continue cooperative management to protect surface resources on the DOE lease tracts. Continue to assist in the processing of mineral actions. Provide for necessary permits for sand and gravel, including possibly 1,200 acres of Ewing Mesa. Provide special

stipulations to protect the unique fossils in the Placerville area. Approximately 1,880 acres in the Nucla KRCRA (33.8 million tons), 1,240 acres in the East Cortez KRCRA (13.3 million tons), and 54,000 acres in the Durango KRCRA (1.8 billion tons) would be available for further consideration for coal leasing.

Cultural Resources. Manage the Anasazi Heritage Center as a cultural resource focal point for BLM in southwestern Colorado. Provide for cultural management of Lowry, Dominguez-Escalante, and Cannonball ruins; McLean Basin Towers; Sand, East Rock, Bull, Cross, Cahone, and Squaw/Papoose canyons; Painted Hand Ruin and Petroglyphs; Dolores Cave; Lightning Tree Tower Group; Hanging Flume; Tabeguache Pueblo and Tabeguache Canyon; Indian Henry's Cabin, Lightning Tree Tower Group, and Hanging Flume; and Hamilton, Cow, and Mockingbird mesas. CRMPs should be developed to outline specific management objectives for each site or area. Provide protective oil and gas stipulations (no-surface occupancy) on Sand and East Rock canyons; Seven Towers, Cannonball, Easter, Lowry, and Dominguez-Escalante Ruins; McLean Basin Towers; Battle Rock, Hovenweep buffer, Lightning Tree Tower; and Painted Hand Petroglyphs. Withdraw from mineral entry and provide for no-surface occupancy stipulations for oil and gas on Painted Hand Ruin, Dolores Cave, Tabeguache Pueblo, Bull Canyon Rockshelter, Indian Henry's Cabin, Lightning Tree Tower Group, and Hanging Flume.

Limit public access in Mockingbird Mesa, Bull Canyon, and Indian Henry's Cabin to foot or horse only and restrict vehicle access to authorized vehicles only. Close Cross, Cahone, Squaw/Papoose, and Tabeguache canyons to all ORV use. Acquire easement into Sand Canyon and administrative access into Cannonball Mesa and Yellowjacket Canyon.

Public Land Disposal. Dispose of approximately 33,000 acres (through sales, exchanges, or any other title transfer means) throughout the planning area as indicated on the Resource Utilization Alternative Map; this includes small, unmanageable, isolated parcels of land scattered throughout the area. In addition, public lands located in the Vigil-Abeyta and Archuleta mesa areas also would be disposed of.

Wild Horses. All wild horses in the planning area would be removed.

Forestry and Wood Products. Provide for intensive timber management on approximately 11,220 acres. Estimated allowable harvest would be 6.6 MMBF per decade. An additional 42,130 acres would be managed to provide woodland products (firewood, posts, poles, etc.). Estimated allowable harvest would be 6.4 MMBF (12,800 cords) per decade.

Soils and Water. Provide protective management on 4,700 acres in Boulder Gulch watershed to protect water quality for Silverton. Protect water quality in aquifers used for domestic and municipal purposes in the Dry Creek Basin and Tabeguache Creek watersheds.

Manage 50,000 acres in Disappointment Valley and Dry Creek Basin to reduce erosion and sediment. Manage 50,000 acres in Disappointment Valley and Yellowjacket Canyon to reduce salinity in the Colorado River. Reclaim five pollution sources (of heavy metals) in the Upper Animas River drainage.

CURRENT MANAGEMENT (NO ACTION) ALTERNATIVE

Current Management (No Action) Alternative

Theme

The Current Management Alternative reflects BLM's current management direction, policies, and existing land use plan decisions. It was assumed that no major policy changes would occur and that the same funding level and apportionment of funds for resource programs would continue. The following discussion describes the overall management that would result from implementing this alternative.

Livestock Management. Continue current management of the 11 AMPs (304,000 acres; see Appendix Nine-E in the Draft RMP). Less intensive management will occur on remaining allotments. Range improvements including 7,900 acres of existing vegetation treatments will be maintained (approx. $200,000 over a ten-year period). The Current Management Alternative is the proposed action for livestock grazing, because the Proposed Plan cannot be implemented pending monitoring (W.O. Memorandum 82-650).

Wildlife (Aquatic and Terrestrial). Continue current management to maintain habitat to support 20,000 deer, 1,600 elk, and 175 pronghorn antelope that graze on public lands. Continue management of Perins Peak and Paradox peregrine falcon eyries. Provide protective stipulations to bald eagle roosts and winter eagle concentration areas. Maintain aquatic and riparian habitat. Complete HMPs and improvements necessary for implementation (approx. cost for terrestrial improvements, $191,000 over a ten-year period). Continue management of the McElmo Rare Snake and Lizard Research Natural Area.

Recreation. Continue management of the Silverton SRMA. Maintain limited monitoring and use supervision. Provide public information and assistance concerning the area. Continue ORV (see Table 1-8) and VRM management as per existing MFP direction. Manage the Dolores River Canyon for its wild and scenic qualities as per existing MFP direction. Continue to manage Weber and Menefee mountains for their primitive values noted in the existing MFP.

Wilderness. No designated BLM wilderness areas currently exist in the planning area. Alternative land uses for the eight areas are contained within the other emphasis areas (see the Draft Wilderness Technical Supplement for detailed description).

Minerals. Continue oil and gas leasing subject to environmental stipulations contained in existing oil and gas umbrellas. Lands open to development without lease stipulations will be provided on approximately 1,245,000 acres; lands open to development with lease stipulations (no-surface occupancy) on approximately 39,000 acres; and closed to leasing on approximately 6,000 acres.

Continue cooperative management to protect surface resources on the DOE uranium lease tracts. Provide necessary permits for sand and gravel. Continue existing coal leases (National King Coal, 340 acres [8.6 million tons]; Perma Resources, 90 acres [5.7 million tons]). Emergency leases or lease modifications may be required at a future date.

Cultural Resources. Manage the Anasazi Heritage Center as a cultural resource focal point for BLM in southwestern Colorado. Continue cultural management of Lowry, Escalante, Dominguez, and Cannonball ruins; Hanging Flume; McLean Basin Towers; and Sand Canyon. Continue present protective withdrawals and no-surface occupancy oil and gas stipulations for Sand and East Rock canyons; Cannonball, Easter, Seven Towers, Lowry, Dominguez-Escalante ruins; McLean Basin Towers, Battle Rock, Hovenweep buffer; and Painted Hand Petroglyphs.

CURRENT MANAGEMENT (NO ACTION) ALTERNATIVE

Public Land Disposal. As per existing MFPs, consolidate public land ownership, by sale, exchange, or boundary adjustment, of approximately 16,000 acres throughout the planning area as indicated in the Current Management Alternative Map (see Draft RMP/EIS). This includes small, unmanageable, isolated parcels of land with limited public values scattered throughout the area.

Wild Horses. Continue monitoring approximately 100 horses in the Spring Creek Basin and approximately 21 horses in the Naturita Ridge area (see Appendix Five for more detail).

Forestry and Wood Products. Continue intensive timber management on approximately 9,540 acres of forest lands. The estimated allowable harvest would be 5.6 MMBF per decade. Continue to provide woodland products (firewood, posts, poles, etc.).

Soils and Water. Protect 4,700 acres in Boulder Gulch watershed to ensure water quality for Silverton. Protect water quality in aquifers used for domestic and municipal purposes in the Dry Creek Basin and Tabeguache Creek watersheds.

Special Management Areas. Continue management on the McElmo Rare Snake and Lizard Research Natural Area and proposed mineral withdrawal.

JUNIPER HOUSE (WITHIN SAND CANYON CULTURAL EMPHASIS AREA) IS A CLIFF DWELLING CONSISTING OF APPROXIMATELY 12 ROOMS.

Proposed Plan

Theme

The Proposed Plan balances competing demands by providing needed goods and services, while protecting important and sensitive environmental values. The goal of this alternative is to change present management to the extent necessary to meet statutory requirements and policy commitments and to resolve identified issues in a balanced, cost-effective manner. The following discussion describes the overall management that would result from implementing this alternative.

Livestock Management. Revise existing and develop new AMPs on 71 priority allotments (810,000 acres; see Appendix Nine-E in the Draft RMP). Less intensive management will occur on remaining allotments. Range improvements (approx. $1.0 million for implementation over a ten-year period) should be developed that include 77 miles of new fence, 146 new water developments, 40,100 acres of vegetation treatment (18,000 acres of which includes maintaining existing land treatments).

Available forage (AUMs) for livestock grazing would be an initial reduction of 22,461 AUMs (33%) from current active preference and in the long term would increase 13 percent from current active preference under this alternative. These target livestock use levels may be adjusted in the future to reflect new resource information gathered by monitoring or through using other studies.

Consulting with livestock operators before final decisions are issued will determine whether individual adjustments need to be phased in over a five-year period or whether such adjustments can be fully implemented in the first year. All "I" category allotments will be given a priority for future investments in range improvements and monitoring. Allotments with the greatest potential for improving wildlife, watershed, and vegetation conditions and livestock forage production will be implemented first.

Wildlife--Terrestrial. A goal of this land use plan (subject to the availability of manpower and funds to complete necessary wildlife habitat improvements) will be to manage the habitat for current levels of deer and elk (20,000 and 1,600, respectively). In addition, monitoring the vegetative resource may indicate wildlife reductions may be needed to localized areas to maintain use within the carrying capacity. The reductions may be shared with domestic livestock depending on monitoring results. Provide for 300 head of pronghorn antelope and allow for reintroducing 300 bighorn sheep in the Dolores River Canyon. Continue present management of Perins Peak and Paradox peregrine falcon eyries. Provide protective oil and gas leasing stipulations for bald eagle roosts and winter eagle concentration areas. Reintroduce river otters in the upper Dolores River. Complete necessary improvements and HMPs necessary for implementation (approx. cost, $500,000 over a ten-year period). The following riparian areas should be managed to improve aquatic and(or) riparian habitat; Roc, North and South mesas; La Sal and Dry creeks; the East and West forks of Dry Creek Canyon; and Cross, Cow, Cahone, Hovenweep, and Bridge canyons.

Wildlife--Aquatic. Improve aquatic and riparian habitat on these areas listed in priority order: the upper San Miguel River and its tributaries (44 miles), the upper Dolores River and its tributaries (30 miles), and the lower San Miguel River and its tributaries (20 miles). Develop needed HMPs and improvements for implementation (including monitoring plans; approx. cost, $233,000 over a ten-year period).

Recreation. Continue intensive recreation management of the Silverton SRMA. Provide for a blend of settings and opportunities that tend toward the resource-dependent end of the BLM's ROS system. Allow local communities to provide for facility-dependent settings and opportunities. Provide increased semiprimitive, motorized opportunities with some primitive, semiprimitive, nonmotorized, and roaded natural settings and management objectives. Continue ORV management in the Silverton SRMA as per existing plan (see Table 1-8). Develop and implement a Recreation Area Management Plan for the Silverton SRMA that outlines specific needs for visitor management facilities.

Manage the Dolores River Canyon as a SRMA as per classifications determined by BLM's ROS system. Manage the Dolores River from the Bradfield Bridge to Dove Creek pump station for its semiprimitive nonmotorized recreation setting opportunities and from Dove Creek pump station to Disappointment Creek for its semiprimitive motorized setting opportunities. Also manage the river from Disappointment Creek to Gypsum Valley Bridge for its rural setting opportunities and from Gypsum Valley Bridge to Bedrock for its primitive ROS values and settings. Determine carrying capacities for the river corridor consistent with specific ROS setting classifications. Develop a Recreation Area Management Plan for the river that outlines specific management goals, objectives, and facilities needed.

Manage Weber and Menefee mountains for their semiprimitive recreation values. Both areas should be closed to ORVs and managed under VRM Class II standards.

The McElmo Research Natural Area (RNA; see Glossary) will be managed for research values but revocation of the mineral withdrawal will occur. No-surface occupancy stipulations for oil and gas leasing will be continued.

Wilderness--Introduction. This recommendation is preliminary and subject to administrative review. A final legislative wilderness EIS will be developed for the eight WSAs in this planning area; after completing the administrative review and filing by the Secretary of the Interior, the EIS will be available for public review. Following the wilderness EIS's release, the Secretary will make his final recommendations to the President for the eight WSAs.

Suitable--Dolores River Canyon WSA. The Dolores River Canyon WSA is being recommended as preliminarily suitable for wilderness designation, primarily because it possesses highly outstanding characteristics for primitive and unconfined recreation, solitude, and naturalness, as well as scenic grandeur and superb wilderness characteristics. It is a nationally unique area and is worthy of preservation in its natural state. The nationally significant values associated with Dolores River Canyon WSA include:

(1) Formerly a Wild and Scenic River candidate as recommended by an interagency study report in 1976 and recommended to Congress for protection on several occasions;
(2) Outstanding primitive and unconfined recreation opportunities associated with the river, canyons, and mesas;
(3) Unique plant and animal communities found within the WSA that contain threatened and endangered species habitat; and
(4) Extremely diverse topography and geology that lends to the creation of outstanding scenery, vistas and excellent solitude opportunities.

This unique combination of factors, found only in the Dolores River Canyon WSA, creates the specific need and rationale for BLM to recommend this area as preliminarily suitable for wilderness designation.

A total of 28,539 acres would be recommended--the acreage and boundaries listed in the Wilderness Manageability Alternative and Preferred Alternative in the Draft Wilderness Technical Supplement (April 1984). A wilderness management plan will be developed following the area's designation by Congress.

Nonsuitable--Specific Rationale--Cross, Cahone, and Squaw/Papoose Canyon WSAs. Cross, Cahone, and Squaw/Papoose canyon WSAs would be recommended as nonsuitable for wilderness designation based on the following reasons:

(1) All three WSAs have manageability problems because of numerous pre-FLPMA oil and gas leases, encumbering an average of approximately 42 percent of the public land within these WSAs (see maps and narrative in Appendix Four); they also contain numerous mining claims. There is a moderate to high probability that some of the pre-FLPMA leases or mining claims will be developed during the term of the plan.

(2) They do not contain nationally significant values (scenery, T&E habitat, and recreation) unique enough for wilderness designation. Although their cultural resources are unique, these cultural values, along with the other primary values identified (roadless, wildlife, etc.), will be properly managed in consonance with other resources including livestock grazing, aquatic/riparian habitat, and minerals.

Nonsuitable--Specific Rationale--Weber and Menefee Mountain, McKenna Peak, and Tabeguache Creek WSAs. Weber and Menefee mountains, McKenna Peak, and Tabeguache Creek WSAs would be recommended as nonsuitable for wilderness designation based on the following reasons:

(1) The values contained in each area (i.e., scenery, wildlife habitat, etc.) are not nationally significant enough for inclusion in the NWPS. While they may be locally or, in some cases, regionally important, to be suitable for recommendation, BLM feels that these areas should contain a substantial amount of nationally significant values to be recommended for inclusion in the NWPS.

(2) The management proposed by BLM is the most appropriate use of the land (see following table) and would protect the sensitive resources found in each area.

(3) The majority of the primary values identified (roadless, visual, wildlife habitat, etc.) by the public can be managed in a nonwilderness alternative management scheme through professional application of the principles of multiple use management.

(4) Weber Mountain WSA has four pre-FLPMA oil and gas leases (see Appendix Four, Table 4-3) with known oil and gas production (a KGS is located at its northern boundary), which raises concerns as to its future management. Developing these leases (which has a low to moderate probability to occur) would severely affect the values contained in the area.

(5) Tabeguache Creek WSA is a sensitive area ecologically and archaeologically. Protecting the wildlife and archaeological values can be accomplished by designating the canyon as an Outstanding Natural Area (ONA). Recreation use may be incompatible with this proposed management direction. Visitor use of the area may be limited only to educational and scientific purposes; a management plan would be written after the area is designated an ONA and would consider those uses. The integrity of the main canyon will also be protected by an ORV closure and no-surface occupancy stipulations for oil and gas leasing.

(6) These four WSAs would not significantly expand wilderness opportunities within a day's driving time of major population centers, because there are significant designated wilderness areas in the immediate region (see Appendix Three-A of the Draft Wilderness Technical Supplement).

These seven areas met the basic definition of WSAs and were therefore identified as WSAs; however, they do not contain nationally significant values to the same degree, extent, or combination of those found in the Dolores River Canyon WSA, or other WSAs previously recommended in Colorado's BLM districts. BLM's Montrose District has previously studied eight WSAs and one Instant Study Area in recent EISs.

Therefore, it is BLM's recommendation that these seven WSAs do not warrant inclusion into the NWPS; they would be managed under BLM's Interim Management Policy for WSAs until the wilderness review process is completed. If recommendations presented in this Final EIS are adopted, the areas would be managed as follows:

WSA	Recommendations
1. Cahone Canyon	Cultural resources, livestock grazing, aquatic/riparian habitat improvements, oil and gas leasing (primarily no-surface occupancy stipulations) and ORV closures.
2. Cross Canyon	Same as Cahone Canyon.
3. McKenna Peak	Watershed and wildlife values, livestock grazing, and ORV restrictions (existing road and trails).
4. Menefee Mountain	Recreation (semiprimitive, nonmotorized), wildlife values, ORV closures, and oil and gas leasing (primarily no-surface occupancy stipulations).
5. Squaw/Papoose Canyon	Same as Cross and Cahone canyons.
6. Tabeguache Creek	Cultural resources, aquatic/riparian values, oil and gas leasing (primarily no-surface occupancy stipulations) and ORV closures.
7. Weber Mountain	Same as Menefee Mountain.

Minerals. Continue oil and gas leasing subject to environmental stipulations. Lands open to development without lease stipulations will be provided on approximately 1,196,000 acres; lands open to development with lease stipulations (no-surface occupancy) on approximately 65,000 acres; and closed to leasing on approximately 29,000 acres.

Continue cooperative management to protect surface resources on the DOE uranium lease tracts. Provide for necessary permits for sand and gravel, including possibly 400 acres on Ewing Mesa. Provide protective stipulations to protect the unique fossils in the Placerville area. Approximately 1,480 acres in the Nucla KRCRA (26.6 million tons) and 46,000 acres in the Durango KRCRA (1.5 billion tons) would be available for further consideration for coal leasing.

PROPOSED PLAN

The East Cortez KRCRA presently will not be available for coal leasing; it will be managed under a wildlife emphasis. This area did not receive an expression of interest when a call was made in 1983. The coal present is not of sufficient quality and quantity to be more than locally significant. BLM is also focusing the possible future coal development in other areas where previous coal development has occurred. The wildlife values are significant due to adjacent private land development. The KRCRA could still be considered for leasing in the future, subject to a plan amendment being completed as well as its being reevaluated in a future RMP revision.

Cultural Resources. Manage the Anasazi Heritage Center as a cultural resource focal point for BLM in southwestern Colorado. Provide for cultural management of Lowry, Dominguez-Escalante, and Cannonball ruins; McLean Basin Towers; Squaw/Papoose, Bull, Sand, Cahone, Cross, and East Rock canyons; Painted Hand Ruin and Petroglyphs; Dolores Cave; Tabeguache Pueblo and Tabeguache Canyon; Indian Henry's Cabin; Hanging Flume; Lightning Tree Tower Group; and Hamilton, Cow, and Mockingbird mesas. CRMPs should be developed to outline specific management objectives for each site or area.

Provide protective oil and gas (no-surface occupancy) stipulations on Sand, Cahone, Cross, Squaw/Papoose, Tabeguache, and East Rock canyons; Cannonball, Easter, Seven Towers, Lowry, and Dominguez-Escalante ruins, Lightning Tree Tower, Battle Rock, Hovenweep buffer, McLean Basin Towers and Painted Hand Petroglyphs. Withdrawal from mineral entry and provide for no-surface occupancy for oil and gas leasing on Painted Hand Ruin, Dolores Cave, Tabeguache Pueblo, Bull Canyon Rockshelter, and Indian Henry's Cabin.

Limit public access in Mockingbird Mesa, Bull Canyon, and Indian Henry's Cabin to foot or horse only and restrict vehicle access to authorized vehicles only. Close Cross, Cahone, and Squaw/Papoose canyons to all ORV use. Acquire easement into Sand Canyon and administrative access into Cannonball Mesa and Yellowjacket Canyon.

Manage Tabeguache Canyon as an Outstanding Natural Area (see Glossary). The area will be closed to ORVs and no-surface occupancy stipulations will be provided in the immediate canyon.

Public Land Disposal. Through sales, exchanges, or any other title transfer means, dispose of approximately 21,800 acres throughout the planning area, as indicated on the Preferred Alternative Map (see Draft RMP); this includes small, unmanageable, isolated parcels of land with limited public value scattered throughout the area and Archuleta Mesa.

Wild Horses. The BLM has determined that managing for a viable horse herd would not be a reasonable investment of public funds. Wild horses inflict significant, adverse effects upon the vegetation, soils and water resources and conflict with other resource uses. A better job of managing important big game winter range, watershed, and vegetation could be implemented through eliminating the Spring Creek Basin and Naturita Ridge herds. Additionally, two wild horse ranges, Little Bookcliffs and Sand Wash Basin, currently exist in western Colorado for public viewing. Both ranges are located within commuting distance from major population centers.

Forestry and Wood Products. Provide intensive timber management on approximately 10,960 acres. Estimated allowable harvest would be 6.5 MMBF per decade. An additional 42,130 acres would be managed to provide woodland products (firewood, posts, poles, etc.). Estimated allowable harvest would be 6.4 MMBF (12,800 cords) per decade.

Soils and Water. Provide protective management on 4,700 acres in the Boulder Gulch watershed to protect water quality for Silverton. Protect water quality in aquifers used for domestic and municipal purposes in the Dry Creek Basin and Tabeguache Creek watersheds.

Manage 65,000 acres in the following watersheds to reduce erosion and sediment yield: Disappointment, Big Gypsum, and Paradox valleys and Dry Creek Basin. Manage 46,000 acres in Disappointment Valley to reduce salt (salinity) and sediment flow into the Colorado River.

Develop watershed management plans for all accelerated erosion and salinity areas detailing specific management goals and actions. Reclaim five pollution sources (for heavy metals) in the Upper Animas River drainage.

Area of Critical Environmental Concern (ACEC). The public land west of Cortez (approx. 156,000 acres; see Fig. 1-1) would be designated as an ACEC. Private lands within the ACEC would not be affected by the proposed designation. The proposed Anasazi Culture Multiple Use Area contains important cultural, mineral, recreation, range, back-country values, and wildlife resources. It represents the focus of the northern Anasazi development, with more than 100 sites per square mile in many areas, representing the highest known archaeologic site density per acre of any area in the nation. The total number of sites on public lands here is estimated at nearly 20,000, many covering 10 acres or more. Large oil and gas and CO_2 reserves (within the Sand Canyon KGS) are also contained within the area. Shell Oil Company has made a multimillion dollar investment in these CO_2 resources, with a project life of more than 30 years. The public land within the ACEC provides forage used by livestock and wildlife. The increased mineral development presents a challenge to BLM to provide high quality habitat for the livestock and wildlife dependent upon public lands. Population growth places increased pressure for recreation pursuits on the public lands. These opportunities need to be provided, while emphasizing the cultural and mineral values.

The management of the public lands within the ACEC will be intensified under this proposal. Detailed activity plans will be developed, closer monitoring of the surface-disturbing activities will be undertaken, and additional manpower and money will be requested to more intensively manage this significant resource. (See the ACEC description, L, Appendix Five, for more details on proposed management.)

Alternatives Considered but Eliminated from Detailed Analysis

During the beginning of the alternative formulation process, adding two alternatives was analyzed. One alternative could have been developed that maximized using both renewable and nonrenewable resources; this would have required great trade-offs among the many public land users. It was considered unrealistic in light of the planning issues and BLM's multiple use mandate.

An additional alternative was also analyzed that would have greatly constrained the present public land users and would have allowed the natural ecologic processes to continue throughout the planning area, with only minimal impacts caused by humans. It also would have involved greatly reduced mineral leasing, livestock grazing, and wildlife and cultural resource management. Again it was considered unrealistic in light of the planning issues and BLM's multiple use mandate.

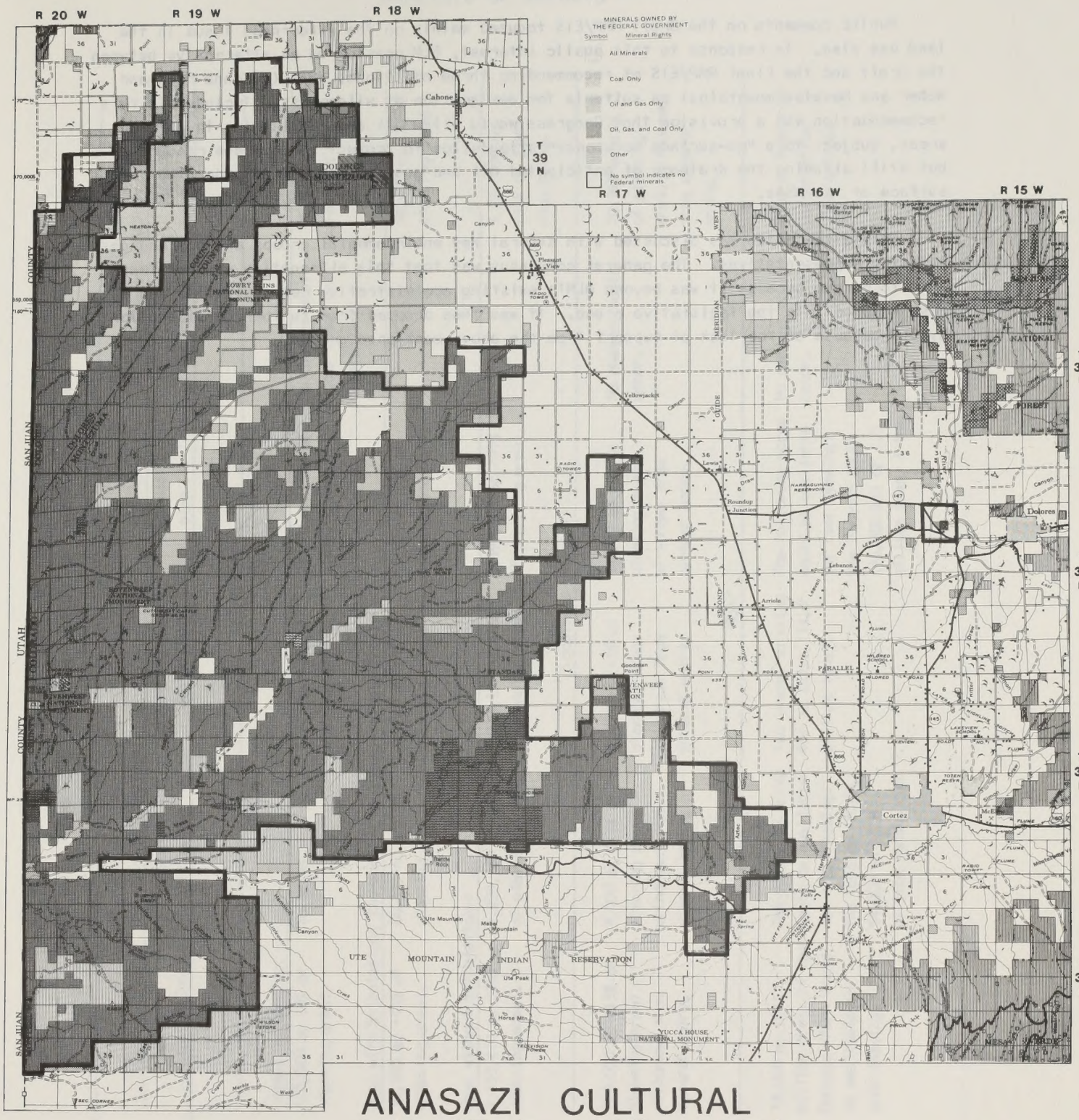


Figure 1-1. Commonly called the Sacred Mountain area, this proposed ACEC contains approximately 156,000 acres of BLM land west of Cortez.

PROPOSED PLAN

Public comments on the Draft RMP/EIS focused mainly on the wilderness issue in the land use plan. In response to this public interest, BLM considered an alternative between the Draft and the Final RMP/EIS of recommending three additional WSAs (McKenna Peak and Weber and Menefee mountains) as suitable for designation as wilderness. Included in this recommendation was a provision that Congress would allow oil and gas leasing in all four areas, subject to a "no-surface occupancy" stipulation to protect the surface resources but still allowing the drainage of anticipated oil and gas resources from under the surface of the WSAs.

This alternative was discussed with several key environmental groups and oil and gas industry representatives. The general consensus was that this alternative was not feasible to pursue because it was beyond BLM's existing administrative responsibility and it also entered into the legislative arena. It was thus dropped from further consideration by BLM because of the lack of support from the above-mentioned groups.

Table 1-11. Comparative Analysis of Impacts for the RMP Alternatives.

Resources/ activities	Alternatives				Subalternatives to Conservation Alternative	
	Resource conservation	Resource utilization	Current management (no action)	Proposed plan	No grazing	Ecological representation
Energy and Minerals	**Oil and Gas**					
	Closed to leasing:					
	103,000 ac (8% of planning area).	No acres.	5,840 ac (<1% of planning area).	28,539 ac (<2% of planning area).	No changes would occur under this alternative.	76,628 ac (6% of planning area).
	Open with Stipulations (no-surface occupancy stipulations):					
	31,985 ac (<3% of planning area).	60,615 ac (5% of planning area).	39,040 ac (3% of planning area).	65,085 ac (5% of planning area).		38,000 ac (3% of planning area).
	Open without Stipulations:					
	1,155,414 ac (89% of planning area).	1,229,385 ac (96% of planning area).	1,245,120 ac (96% of planning area).	1,196,285 ac (93% of planning area).		1,245,000 ac (96% of planning area).
	Locatable Minerals					
	129,000 ac (13% of planning area) withdrawn from mineral entry.	4,000 ac (<1% of planning area) withdrawn from mineral entry.	4,400 ac (<1% of planning area) withdrawn from mineral entry.	34,000 ac (3% of planning area) withdrawn from mineral entry.	No changes would occur.	70,188 ac (7% of planning area) withdrawn from mineral entry.
	Coal					
	34,000 ac (943 million tons) in the Durango KRCRA would be available for coal leasing.	The following acres would be available for coal leasing: the Durango KRCRA, 54,000 ac (1.8 billion tons), the	Two leases totaling 430 ac exist (14.3 million tons).	The following acres would be available for coal leasing: the Durango KRCRA (46,000 ac) or 1.5 billion tons, & the	No changes would occur.	Same as Resource Conservation Alternative.

Table 1-11. (continued)

Resources/ activities	Alternatives				Subalternatives to Conservation Alternative	
	Resource conservation	Resource utilization	Current management (no action)	Proposed plan	No grazing	Ecological representation
Energy and Minerals (continued)			Coal (continued)			
	All of the East Cortez & Nucla KRCRAs would not be available for coal leasing.	East Cortez KRCRA, 1,880 ac (13.3 million tons), & the Nucla KRCRA, 1,880 ac (33.8 million tons).		Nucla KRCRA (1,480 ac) or 26.6 million tons. The East Cortez KRCRA would not be available for coal leasing.		
	Wilderness designation of all WSAs will preclude developing coal, oil & gas, CO_2, & uranium reserves on 102,601 ac, except where valid existing oil & gas leases & mining claims are present.			Wilderness designation of the Dolores River Canyon WSA would result in significant losses of oil & gas reserves.		Wilderness designation of the four WSAs would result in significant losses of oil, gas & CO_2 reserves, except where valid existing oil & gas leases & mining claims are present.
	Significant, long-term adverse impacts would result from no leasing & no-surface occupancy stipulations for oil & gas leasing & withdrawals from mineral entry.	Significant, long-term adverse impacts would result from no leasing & no-surface occupancy stipulations for oil & gas leasing & withdrawals from mineral entry.	No significant impacts would occur.	Significant, long-term adverse impacts would result from no-surface occupancy stipulations for oil & gas leasing & withdrawals from mineral entry.	No changes would occur.	Significant, long-term adverse impacts would result from no leasing & no-surface occupancy stipulations for oil & gas leasing & withdrawals from mineral entry.

Table 1-11. (continued)

Resources/ activities	Alternatives				Subalternatives to Conservation Alternative	
	Resource conservation	Resource utilization	Current management (no action)	Proposed plan	No grazing	Ecological representation
Vegetation	Long-term, beneficial changes in vegetation condition would improve watersheds, wildlife habitat, & livestock production.	Long-term, positive impacts would be similar to those listed under the Resource Conservation Alternative, except to a greater extent.	Site-specific, adverse impacts would continue with detrimental effects to vegetation.	Long-term, positive impacts would be similar to those listed under Resource Conservation Alternative.	Long-term, positive impacts would occur due to removing livestock.	Impacts would be similar to the Resource Conservation Alternative, except fewer areas would be preserved due to designating the four WSAs as wilderness.
Soils and Water	Long-term, significant decreases in erosion, sediment, & salinity yields would occur. Municipal & domestic water sources would be protected. Potential losses of opportunities for salinity control work in portions of McKenna Peak WSA could occur.	Long-term decreases in erosion, sediment, & salinity yields would occur. Municipal & domestic water sources would be protected.	Continued high erosion & sediment yields would occur. Salt loading in the Colorado River would remain unchanged. Municipal & domestic water sources would be protected.	Impacts would be similar to those listed under Resource Utilization Alternative.	Long-term, beneficial impacts would occur due to lack of surface disturbance & vegetation protection.	Impacts would be similar to those listed under Resource Conservation Alternative, except less area (36%) would be protected.

Table 1-11. (continued)

Resources/ activities	Alternatives				Subalternatives to Conservation Alternative	
	Resource conservation	Resource utilization	Current management (no action)	Proposed plan	No grazing	Ecological representation
Terrestrial Wildlife	Long-term improvements in habitat conditions would occur. Land disposal would cause adverse impacts to winter range (2%) & riparian values (3+ mi). T&E species would benefit from increased protection. Big game herds would remain static.	Habitat conditions would improve in long term. Increased land disposal would cause adverse impacts due to habitat loss (3%). T&E species would be enhanced & big game herds would increase.	Habitat conditions would remain static or would decline in long term. Big game populations would decline in long term.	Impacts would be similar to those listed under the Resource Conservation Alternative. ACEC designation would have long-term, positive impacts on wildlife through more intensive management.	Long-term, potential decline in habitat condition would occur, but overall impacts would be positive to wildlife habitat.	Impacts would be similar to those listed under Resource Conservation Alternative, except less wilderness area (36%) would be designated & fewer areas of wildlife habitat would be protected.
	Manage habitat for 20,000 deer, 1,600 elk, 300 pronghorn, & 300 bighorn sheep.	Manage habitat for 24,000 deer, 3,000 elk, 500 pronghorn, & 500 bighorn sheep.	Manage habitat for current population levels of 20,000 deer, 1,600 elk & 175 pronghorn antelope.	Manage habitat for 20,000 deer, 1,600 elk, 300 pronghorn, & 300 bighorn sheep.		
Aquatic Wildlife	Long-term, beneficial impacts would occur on 250 miles of aquatic & riparian habitat.	Long-term, beneficial impacts would occur on 400 miles of aquatic & riparian habitat. Improved fishery resources would occur.	Some habitat would continue to decline; others would remain static or improve.	Long-term, beneficial impacts would occur on 94 miles of aquatic & riparian habitat. Intensive livestock & wildlife management would occur on an additional 306 miles of habitat.	Long-term beneficial impacts would occur.	Impacts would be similar to those listed under Resource Conservation Alternative but less area (36%) would be protected.

Table 1-11. (continued)

Resources/ activities	Alternatives				Subalternatives to Conservation Alternative	
	Resource conservation	Resource utilization	Current management (no action)	Proposed plan	No grazing	Ecological representation
Livestock Grazing	Significant, long-term adverse impacts to livestock operators would occur due to lowered livestock production.	Significant, beneficial long-term impacts to livestock operators would occur due to increases in livestock production.	No change under this alternative would occur to livestock use levels.	Similar to impacts listed under Resource Utilization Alternative. ACEC designation would have long-term positive impacts to livestock management in the Sacred Mountain area through more intensive management.	Livestock use consisting of 64,232 AUMs would be lost in short & long term, causing significant, adverse impacts to livestock operators.	No significant impacts would occur.
	Livestock use would decrease 33% from current active preference.	Livestock use would increase 29% from current active preference.		Livestock use would increase 13% from current active preference.		
Wild Horses	Wild horse populations would be managed at healthy, viable levels in Spring Creek (75 head) & Naturita Ridge (50 head) herd areas.	Negative impacts to public viewing would occur due to removing horses. Positive, long-term impacts would occur to vegetation, livestock, & wildlife resources.	Populations would continue to increase with locally significant, adverse impacts to vegetation, livestock grazing, & big game habitat. Horse populations (approx. 100 head in Spring Creek Basin, 24 in Naturita Ridge) would decline in their viability in long term.	Impacts would be similar to those listed under Resource Utilization Alternative.	Wild horses would increase in long term in both areas.	Impacts would be similar to those listed under Resource Conservation Alternative.

Table 1-11. (continued)

Resources/ activities	Alternatives				Subalternatives to Conservation Alternative	
	Resource conservation	Resource utilization	Current management (no action)	Proposed plan	No grazing	Ecological representation
Forestry	Insignificant production losses would occur. Improved management would increase wood fiber production over the long term. Estimated allowable timber harvest would be 4.7 MMBF/decade, & woodland harvest, 5.3 MMBF/decade.	Insignificant production increases would occur. Impacts would be similar to Resource Conservation Alternative. Estimated allowable timber harvest would be 6.6 MMBF/decade & woodland harvest, 6.4 MMBF/decade.	Insignificant production increases would occur. Impacts would be similar to Resource Conservation Alternative. Estimated allowable timber harvest would be 5.6 MMBF/decade. No woodland acres are intensively managed.	Insignificant production increases would occur. Impacts would be similar to Resource Conservation Alternative. Estimated allowable timber harvest would be 6.5 MMBF/decade & woodland harvest 6.4 MMBF/decade.	Woodland (24,000 acres) would be made available for intensive management.	Impacts would be similar to Resource Conservation Alternative.
Recreation	Long-term, beneficial impacts would occur. Wilderness designation would have both positive & negative, long-term impacts to recreation opportunities & settings.	Long-term, beneficial impacts would occur. Recreation settings & opportunities would be provided. Need for atypical ecotypes & recreation settings would continue with no WSAs designated as wilderness.	Impacts would be similar to those listed under Resource Utilization Alternative.	Impacts would be similar to those listed under Resource Conservation Alternative. Dolores River Canyon WSA would be designated as wilderness, ACEC designation would have positive, long-term impacts on recreation settings & opportunities through more intensive management.	Big game hunting opportunities would increase initially & then gradually decline.	Impacts would be similar to those listed under Resource Conservation Alternative, but fewer acres would be designated as wilderness.

Table 1-11. (continued)

Resources/ activities	Alternatives				Subalternatives to Conservation Alternative	
	Resource conservation	Resource utilization	Current management (no action)	Proposed plan	No grazing	Ecological representation
Recreation (continued)	Management of Dolores River Canyon & Silverton SRMAs would be intensified.	Management of Dolores River Canyon & Silverton SRMAs would be intensified.		Manage McElmo RNA but remove proposed mineral withdrawal.		
Cultural Resources	Overall long-term, beneficial impacts would occur. Potential adverse impacts because of increased visitor use would occur that would be associated with wilderness designation.	Overall long-term, beneficial impacts would occur; however, site-specific, adverse impacts would occur due to increased mineral development on Cross, Cahone, & Squaw/Papoose canyons.	Impacts would be similar to those listed under Resource Utilization Alternative. Low levels of cultural resource management will continue to adversely affect these resources.	Effects would be similar to those listed under Resource Conservation Alternative, but ACEC designation would have long-term, positive impacts on cultural resources through more intensive management. Manage Tabeguache Canyon as an ONA.	Long-term beneficial impacts would occur because of eliminating livestock trampling on cultural resource sites.	Impacts would be similar to those listed under Resource Conservation Alternative, except that four WSAs would be designated instead of eight.
Visual Resources	Approx. 50% of important landscapes within planning area would be protected.	Approx. 45% of important landscapes within planning area would be protected.	No VRM classes have been established.	Approx. 70% of important landscapes within planning area would be protected.	No significant impacts would occur.	Effects would be similar to those listed under Resource Conservation Alternative, but fewer acres would be affected.

Table 1-11. (continued)

Resources/ activities	Alternatives				Subalternatives to Conservation Alternative	
	Resource conservation	Resource utilization	Current management (no action)	Proposed plan	No grazing	Ecological representation
Wilderness Resources*	Long-term, positive impacts to wilderness values would occur. Natural values would be enhanced. Diversity in NWPS would be enhanced as would supplemental values. All eight WSAs (102,601 ac) would be recommended for wilderness.	Potential permanent losses of wilderness characteristics & values would occur.	Potential permanent losses of wilderness characteristics & values would occur. Prior MFPs did not consider wilderness.	Dolores River Canyon WSA (28,539 ac) would be recommended for wilderness. Impacts would be similar to those listed under Resource Conservation Alternative for Dolores River Canyon WSA & same as Resource Utilization Alternative for other seven WSAs.	Long-term, beneficial impacts would occur due to protecting vegetation.	Impacts would be similar to those listed under Resource Conservation Alternative for Cross and Dolores River canyons, McKenna Peak, and Weber Mountain WSAs. Approx. 65,961 acres would be recommended for wilderness. Impacts would be similar to those listed under the Preferred Alternative for Cahone & Squaw/Papoose canyons, Tabeguache Creek, & Menefee Mountain WSAs.

* This does not include all alternatives discussed in the Draft Wilderness Technical Supplement.

Table 1-11. (continued)

Resources/ activities	Alternatives				Subalternatives to Conservation Alternative	
	Resource conservation	Resource utilization	Current management (no action)	Proposed plan	No grazing	Ecological representation
Lands	Lands disposal (approx. 1.8% or 18,000 ac of planning area) will be long-term, beneficial use through improving management efficiency. Some impacts would occur to ROWs and private lands due to wilderness designation.	3.3% of planning area (33,000 ac) would be disposed of, improving management efficiency. No wilderness would be designated.	Impacts would be similar to those listed under Resource Utilization Alternative, except 1.6% of planning area (16,600 ac) would be disposed of.	Impacts would be similar to those listed under Resource Conservation Alternative, except there would be fewer impacts from wilderness designation on ROWs & private land. 2.2% of planning area (22,000 ac) would be disposed of.	No impacts would occur under this alternative.	Impacts would be similar to Resource Conservation Alternative, except only four areas would be designated wilderness.
Fire Management	Under this alternative, improved fire management in ecological setting would occur.	Impacts would be similar to those listed under Resource Conservation Alternative.	No significant impacts would occur under this alternative.	Impacts would be similar to those listed under Resource Conservation Alternative.	No important impacts would occur under this alternative.	No change would occur under this alternative.
ORV Use	Public lands would be designated 80% open, 6% limited, & 14% closed to ORVs.	Public lands would be designated 82% open, 10% limited, & 8% closed to ORVs.	Public lands are currently 95% open, 4% limited, & less than 1% closed to ORVs.	Public lands would be designated 79% open, 11% limited, & 10% closed to ORVs.		
Economics	Increased revenues for recreation & tourism would occur, but, overall, no significant impacts.	Increased revenues are projected, but no significant impacts would occur.	No significant impacts are currently occurring.	Impacts would be similar to those listed under Resource Conservation Alternative.	Individual ranchers would be significantly affected but significant impact would occur overall.	Impacts would be similar to those under the Resource Conservation Alternative.

Source: BLM Data 1984.

CHAPTER TWO - AFFECTED ENVIRONMENT

CHAPTER TWO

CHAPTER TWO

AFFECTED ENVIRONMENT

INTRODUCTION

Chapter Two summarizes various physical, biologic, and socioeconomic characteristics of the planning area that affect or are affected by the RMP. Much of the information contained is summarized from the Management Situation Analysis (MSA), which is available for review at the Durango San Juan Resource Area Office. The MSA includes more detailed material not duplicated in this RMP/EIS, including a description of current management (summarized in Chapter One, Alternatives).

Climate

The San Juan/San Miguel planning area (see Fig. 2-1) is located in a high plateau and mountainous, continental climate regime characterized by dry air, sunny days, clear nights, low to moderate precipitation and high evaporation, and extreme daily temperature changes (see Table 2-1). The Continental Divide borders the eastern portion of the study area, and the very high, rugged terrain of the San Juan Mountains is to the east and north. The western and southwestern portion is characterized by high mesas and deserts. The region's complex topography causes considerable variation in site-specific temperature, precipitation, and surface winds. Extremely frigid conditions and blizzards can occur, but severe weather conditions such as tornadoes, floods, and damaging hail are rare.

The climatology of the planning area is diverse; the following description describes a range of climatic conditions throughout the planning area. Temperatures vary mostly with elevation, and to a lesser extent, with local microclimate. At higher elevations, summer temperatures generally range from lows of 37°F to highs of 73°F. Winter temperatures range from 1°F to 36°F. Extreme temperatures fall as low as -45°F or as high as 90°F. Freezing temperatures and snowfall are possible year-round, with snow accumulation likely from September through May. At lower elevations, summer temperatures will range from 50°F to 93°F. Winter temperatures range from -14°F to 43°F. Extreme temperatures fall as low as -26°F or as high as 104°F. Freezing temperatures are likely from September through May, with snow accumulation from October through April.

Annual precipitation is highly variable, ranging from 12 inches (in.) to 39 in., with a small summer maximum due to thunderstorms. At the highest elevations, most precipitation comes from winter snowstorms. Snowfall amounts vary from approximately 24 in. at the lower elevations to more than 360 in. at Wolf Creek Pass; mountainous accumulation may vary from 30 in. to 89 in.

Although upper level winds may predominate from the west and southwest, the diverse and rugged terrain of the planning area results in complex windflows and surface winds. Synoptic (pressure gradient) winds are forced around hills or channeled through valleys, but without strong gradient flows, daily upslope and downslope winds predominate. Upslope winds usually occur on sunny mornings when the air at higher elevations heats rapidly and rises. Downslope winds occur in the evenings when the air near the ground cools, becomes dense and sinks downward along drainages. The planning area is located in the southwest air basin of Colorado, which is defined based on drainage winds, indicating areas of similar atmospheric flow, topographic influence and general dispersion potential.

Figure 2-1. San Juan-San Miguel planning area boundaries, showing major towns and counties.

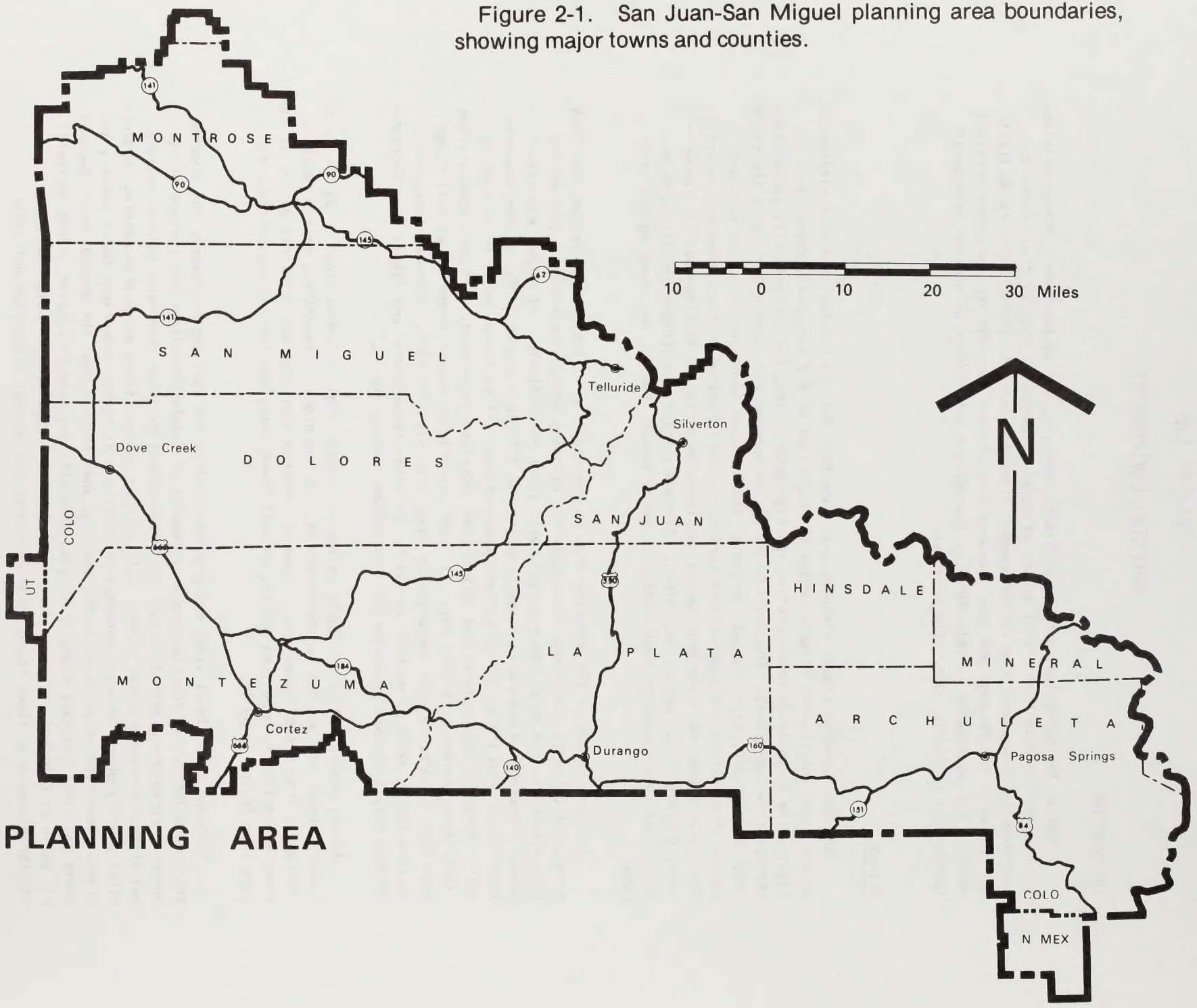
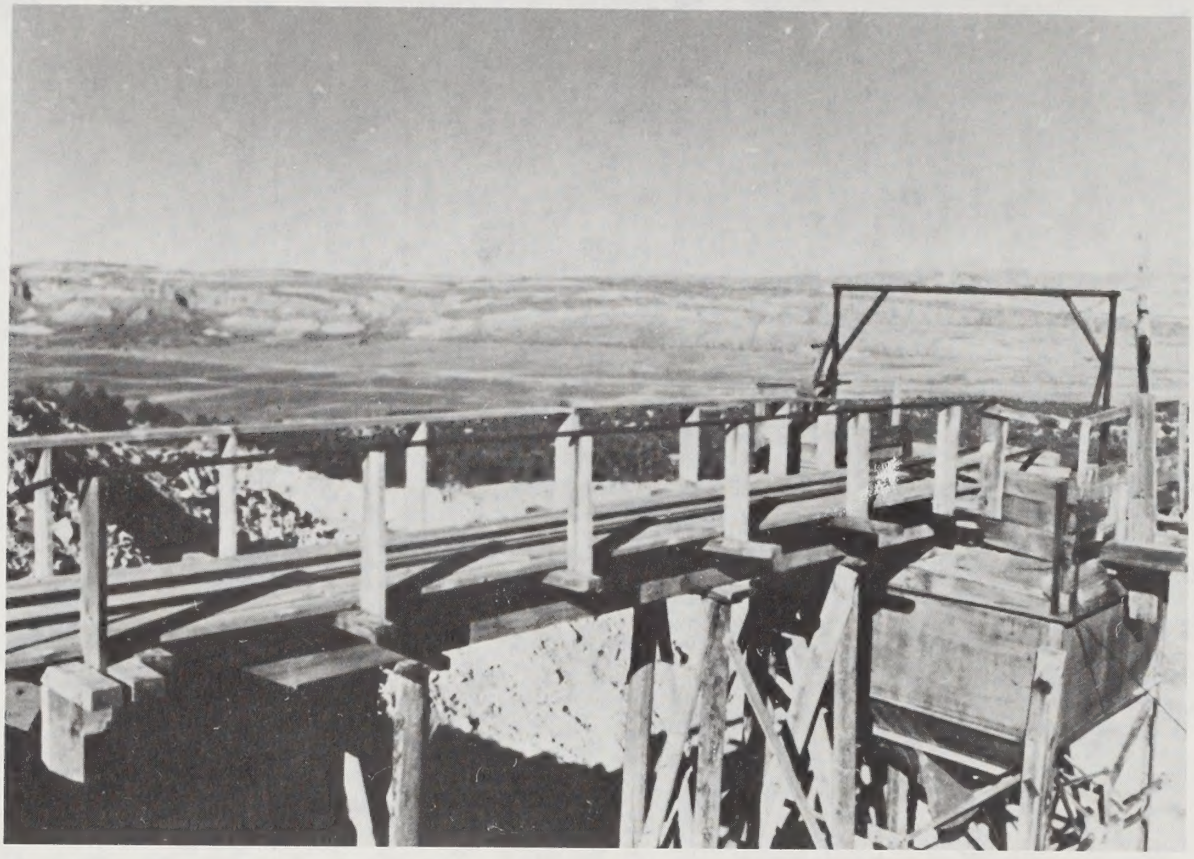


Table 2-1. Selected Climatic Data.

Station	Elevation (ft; mean sea level)	Temperatures (°F)					Precipitation (in.)				Frost-free periods		
		Extreme minimum	Mean minimum	Annual mean	Mean maximum	Extreme maximum	Annual mean	Monthly maximum	Monthly minimum	Mean snowfall	Days	Mean (begin date)	Mean (end date)
Cortez	6,185	-27	34	48	64	100	12.6	1.7	0.4	43	126	5/29	10/2
Durango	6,545	-29	28	46	64	97	18.5	2.6	0.7	67	152*	5/18*	10/17*
Fort Lewis	7,595	-35	27	43	57	93	17.3	2.2	0.8	79	96	6/13	9/17
Ignacio	6,430	-35	28	46	64	102	13.8	1.8	0.6	40	106	6/7	9/21
Mesa Verde N.P.	7,070	-20	37	50	63	99	17.7	2.2	0.7	79	158	5/14	10/19
Norwood	7,020	-31	28	45	59	93	14.2	2.0	0.7	60	109	6/7	9/24
Pagosa Springs	7,235	-45	25	43	61	99	18.9	2.5	0.7	124	58	6/21	8/18
Paradox	5,315	-20	34	50	68	104	11.8	1.7	0.5	24	129	5/21	9/27
Silverton	9,315	-36	19	37	54	84	22.4	3.0	1.2	140	10	6/28	7/8
Telluride	8,760	-33	23	39	55	90	21.7	2.9	1.0	147	40	6/23	8/2
Vallecito Dam	7,645	-35	27	43	59	91	25.2	3.1	1.1	130	112	6/4	9/24
Wolf Creek Pass	9,415	-18	25	37	52	88	40.9	4.9	1.1	363	20*	6/24*	7/14*

* U.S. Department of Commerce 1981.
Source: Pedco Environmental, Inc. 1981.



MINE WORKINGS NEAR THE PARADOX VALLEY AREA.

(Under stable conditions, pollutants tend to collect and concentrate in an air basin until regional synoptic winds disperse the air between basins.)

Air Quality

The air quality is believed to be typical of undeveloped regions in the western United States; ambient pollutant levels are usually near or below the measurable limits. Preliminary estimates for pollutant concentrations in the planning area are available in the San Juan Resource Area Office. Locations vulnerable to decreasing air quality from extensive development include immediate operation areas (surface mines, milling operations, power plants, etc.), and local population centers with their induced impacts. Seasonal average standard visual range measurements (distance) at Mesa Verde National Park vary from 88 to 150 miles.

Most of southwestern Colorado has been designated a Prevention of Significant Deterioration (PSD) Class II (Federal air quality increment) attainment area. Some towns have measured high Total Suspended Particulate (TSP; see Glossary) levels (exceeding increments), but since the cause is primarily natural fugitive dust, these towns have been designated "unclassified" for TSP. PSD Class I areas in the planning area include Mesa Verde National Park and Weminuche Wilderness Area. The former Wilson Mountain Primitive Area (now part of Lizard Head Wilderness) is a Colorado Category I air quality area under the U.S. Forest Service's (USFS) jurisdiction.

AFFECTED ENVIRONMENT--MINERALS

Minerals

Leasable

Coal. Coal is found in three geologic formations within the planning area: the Dakota, Menefee, and Fruitland. The Dakota sandstone crops out in the western portion of the area; however, only near the East Cortez and Nucla KRCRAs (Fig. 2-1a) does there appear to be commercial quantities of coal in the Dakota Formation. The other coals in the formation appear to be rather discontinuous, reaching a maximum thickness of 2 feet. In many places only a highly carbonaceous shale is present (Cullins and Bowers 1965). Dakota coal is considered to be of coking quality in the Nucla area and of marginal coking quality in the East Cortez area (see Table 2-2).

The other two formations (Menefee and Fruitland) that contain coal are exposed on the north and northeast margins of the San Juan Basin (Shomaker 1971). Both Menefee and Fruitland coals are considered to be of coking quality dependent on their location in the KRCRA. The Menefee and Fruitland outcrops trend along the northern boundary of the Durango KRCRA in Colorado. Past coal mining in the Menefee and Fruitland formations supported the Denver and Rio Grande railroad spurs and may have also provided domestic needs, while mining in the Dakota Formation mainly provided for local needs.

All of the Nucla (2,080 acres, 35 million tons) and the East Cortez (2,840 acres, 30 million tons) KRCRAs are 100 percent mineable by surface methods. In the Durango KRCRA (143,780 acres), approximately 5 percent (300 million tons) of the area is mineable by surface ~~and underground methods~~; the remaining 95 percent (5 billion tons) is mineable only by underground methods.

Coal production in the planning area has been from three major mining operations: the Martinez Strip (Chimney Rock; east of Durango), the King Coal (National King Coal; west of Durango), and the Nucla Strip (see Table 2-3 for breakdown of coal production and Fig. 2-1b). The National King Coal mine has been the only coal producer from public land in the planning area in the last ten years.

A call for coal resource information was made in early 1983 and expressions were indicated in two areas in the Durango KRCRA, the Chimney Rock and Hay Gulch areas. Based upon the lack of expressions in other areas, this plan focused the unsuitability analysis on only high and moderate lands in the KRCRAs. No expressions were received on the Nucla or East Cortez KRCRAs.

Demand for coal can be expected to increase slightly once leasing begins in the Colorado portion of the San Juan region. Factors that limit increased demand for coal in the planning area are lack of transportation (no nearby railheads) and contracts to purchase any coal that is produced--factors which have considerable influence on the stability of the demand for the coal.

Oil and Gas. Oil and gas production, occurring throughout the planning area, has been and is currently from designated oil and gas fields or trend expressions of those fields (see Table 2-4 for major fields and production). Producing formations are the Lower Ismay and Desert Creek units of the Paradox Member of the Hermosa Formation; Rico and Cutler formations; Shinarump Member of the Chinle Formation; Morrison, Dakota, Mesa Verde, and Picture Cliffs Sandstone formations (State of Colorado 1981).

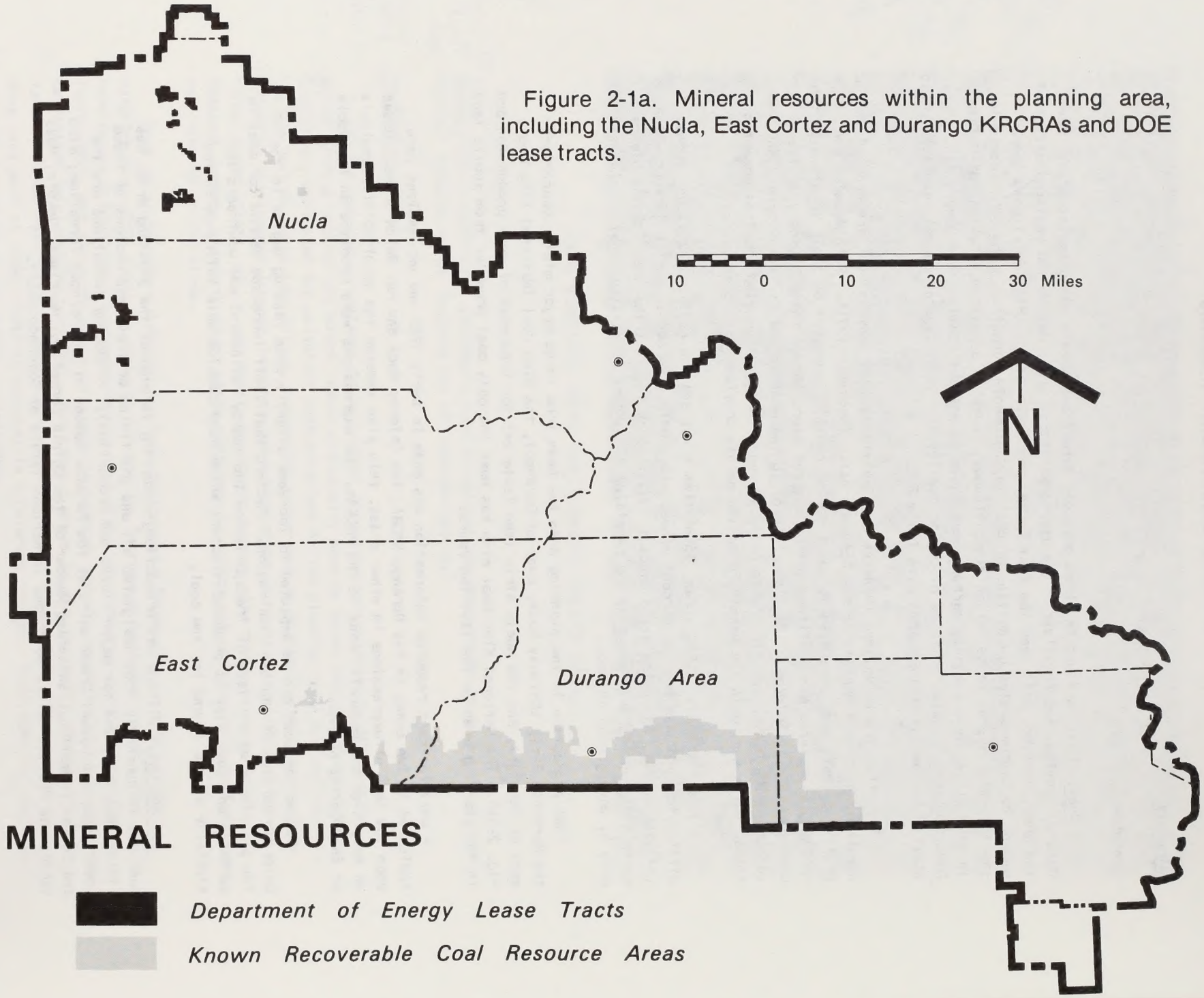


Figure 2-1a. Mineral resources within the planning area, including the Nucla, East Cortez and Durango KRCRAs and DOE lease tracts.

Table 2-2. Quality of Coal in KRCRAs in Planning Area

KRCRA	Coal formation	Quality	
Nucla	Dakota	Subbituminous C to high-volatile A bituminous rank	
			Percent
		Sulfur:	0.3 to 0.7
		Ash:	11.0 to 28.8
			7,373 to 11,546 Btus
East Cortez	Dakota	Generally thin and discontinuous; High-volatile bituminous B or C rank	
			Percent
		Sulfur:	0.7 to 9.8
		Ash:	14.2 to 18.3
			10,440 to 14,400 Btus
Durango	Fruitland: Durango area	Poor quality due to thin shale partings and high ash content	
			Percent
		Sulfur:	1.3
		Ash:	16.8
			11,900 Btus
	Pagosa Springs area	Medium-volatile bituminous rank	
			Percent
		Sulfur:	0.9 to 1.7
		Ash:	11.4 to 23.4
			10,890 to 12,650 Btus
	Menefee: Durango area	High-volatile, bituminous B or C rank	
			Percent
		Sulfur:	<10
		Ash:	<10
			12,500 to 14,000 Btus

Source: BLM Data 1984.

Table 2-3. Coal Production in Planning Area. [1/]

Year	Martinez Strip	King Coal	Nucla Strip
1973	-	9,488	106,798
1974	-	9,912	106,723
1975	-	15,790	104,980
1976	-	16,770	97,939
1977	4,366	22,570	94,402
1978	38,677	66,046	102,393
1979	78,786	92,014	121,752
1980	8,425	87,189	93,069
1981	255,013	135,368	60,260
1982	259,477	121,068	61,237
1983[2/]	252,500	65,077	41,815
Total	897,244	629,939	991,368

[1/] Figures in tons, from 1973 through 1983.
[2/] As of December 1983.
Source: State of Colorado Mine Inspections 1983.

Most of the oil and gas production from public lands in the planning area (approx. 90% of which is currently leased) has come from fields in the western portion of Montezuma, Dolores, and San Miguel counties; most of these fields are located near or overlap the Utah-Colorado border. GEM Reports for Squaw/Papoose, Cross and Cahone canyons (GRA 10, May 1983) have also shown this area to have high potential for oil and gas.

A considerable amount of geophysical (seismic) exploration has been and continues to be conducted; in some cases, the same areas have been explored many times over. The area along the Utah-Colorado border between the Flodine Park and the Papoose Canyon fields is an example of this concentrated seismic exploration.

Oil and gas production in the planning area has remained relatively constant over the period 1971 through 1981 (see Table 2-5). In 1982 the area suffered a decline in the amount of well drilling activity and loss of oil- and gas-related jobs due to a temporary oversupply of oil and gas resulting from energy conservation efforts and depressed economic activity. Oil and gas production from the planning area appears to be consistent with the national trend (Barrick, personnal commun. 1983).

Cross Canyon and Squaw/Papoose Canyon WSAs and the Rare Snake and Lizard Area (480 acres) have been nominated by industry as Areas of Critical Mineral Potential (ACMP; see Glossary) for oil and gas.

Figure 2-1b. Mineral resources within the planning area, including KGSs, existing coal leases and areas under mining Plans of Operations.

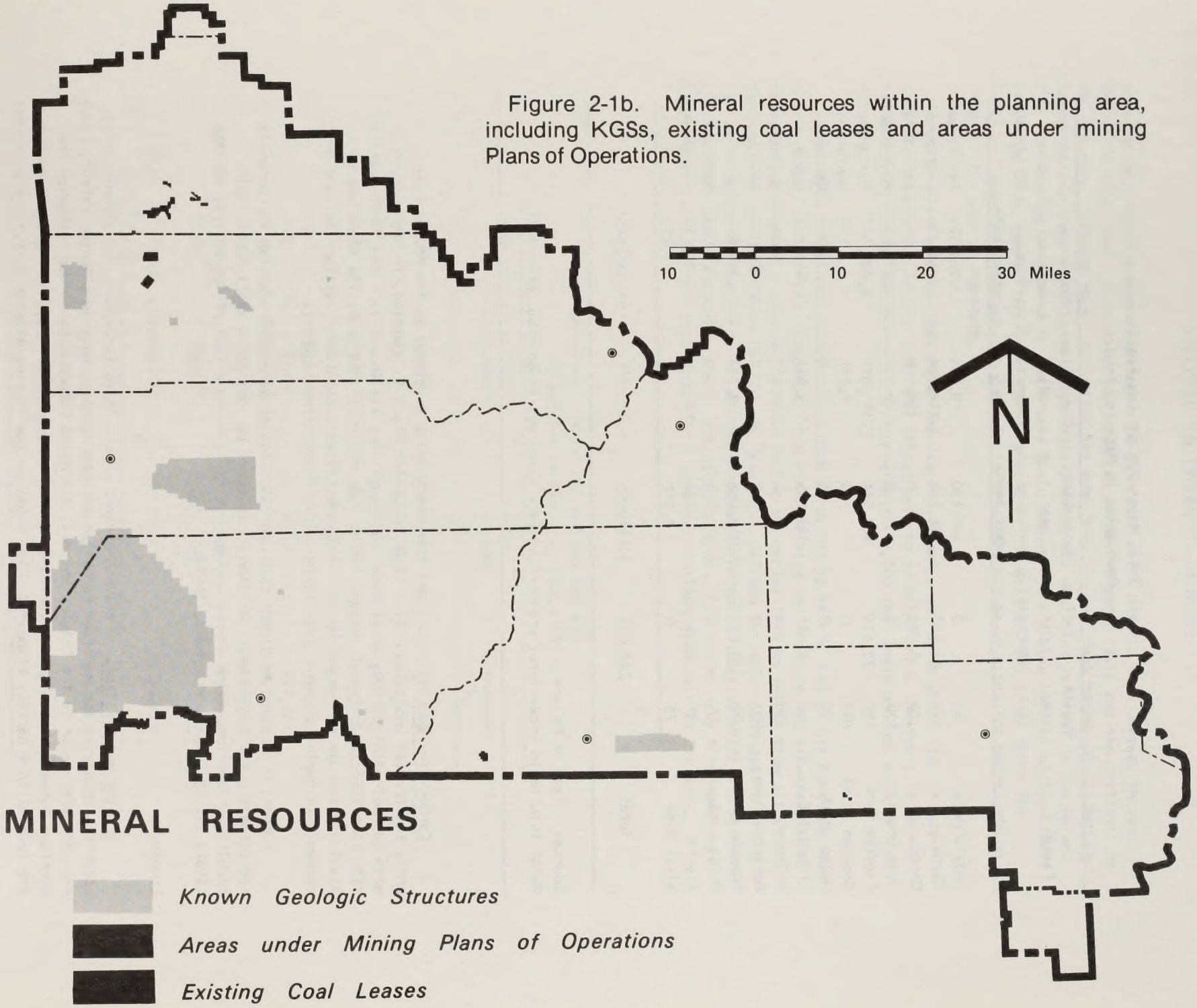


Table 2-4. Major Oil and Gas Fields and Production in Planning Area.

Field	Public land (%)	1981 Oil (barrels)	Production gas (thousand cubic feet)	Cumulative oil (barrels)	Gas production (thousand cubic feet)	County (Colorado)
Andy's Mesa	90	0	349,130	10,696	14,704,629	San Miguel
Cache	67	68,135	78,340	3,514,384	6,723,318	Montezuma
Chromo	25	1,082	0	158,036	6,342	Archuleta
Dove Creek	100	0	0	24,721	372,860	Montezuma
Flodine Park	100	25,530	104,384	2,181,017	8,029,542	Montezuma
Goodman Point	100	0	0	1,401	552	Montezuma
House Creek	10	0	0	0	25,383	Montezuma
Lisbon S.E.	100	7,931	839,233	129,817	11,541,053	San Miguel
McClean	100	0	0	6,124	19,232	Montezuma
Montrose Dome	100	0	0	0	58,092	Montrose
Papoose Canyon	90	113,025	1,055,462	1,720,994	13,200,861	Dolores
Point Lookout	10	0	0	0	23,000	Montezuma
Sierra	45	9,301	132	148,034	27,110	Montezuma
Slick Rock	75	0	4,972	0	4,972	San Miguel
Total		225,004	2,431,653	7,905,224	54,736,946	

Source: State of Colorado 1981.
Note: This table shows total production since field was discovered until 1981.

Carbon Dioxide (CO_2). CO_2 gas fields are being developed in the McElmo Dome area, the premier producing region in Colorado for CO_2. In addition, the Doe Canyon area has potential for CO_2 development, although very little activity has taken place at this time (Barrick personal commun. 1983). CO_2 occurs in the Leadville Limestone of Mississippian age (Ekren and Houser 1965) and its main use is for tertiary oil and gas recovery in depleted fields (see Table 2-5 for production figures).

Current CO_2 demand is higher than what is being produced. Production is currently approximately 400 to 500 mmcf (million cubic feet) per day since Shell began their pipeline production, which should average one billion cubic feet of CO_2 per day by 1988 (Shell Oil Co., personal commun. 1983).

Locatable

Uranium and Vanadium. Uranium and vanadium are found throughout the planning area, occurring mainly in the Morrison Formation of late Jurassic age; to a lesser extent, these elements also occur in the Chinle, Entrada, and Burro Canyon formations. Although the Morrison Formation is widely distributed in the planning area, major ore-grade deposits are located in a narrow, elongated area, known as the "Uravan mineral belt," the principal

uranium- and vanadium-producing region in Colorado, which extends from Gateway through Uravan to Slick Rock. Production has occurred since the early 1900s and has continued to the present. Although major production has been from the Salt Wash Member of the Morrison Formation from this area (Thamm et al. 1981), there has also been interest in the potential for uranium occurrence in the Brushy Basin Member where a mine located on Department of Energy (DOE) Lease Tract C-SR-16A has produced. In general, any areas where the Morrison Formation crops out, or where it lies to some degree at a shallow depth, are of interest for uranium recovery.

The Chinle Formation (the major uranium and vanadium source in Utah) lies at considerable depth (1,600 ft to 3,900 ft) throughout the planning area. However, in the Slick Rock district, the Chinle is at approximately 1,500 feet depth and has been of some interest.

The only known uranium occurrence near Silverton is in the area of Elk Park approximately five miles south of Silverton. The Elk Park Mine has produced approximately 300 tons of (0.2 percent or greater) uranium during the period 1978 to 1980. Mineralization occurs in an area of intense folding and fracturing between two major east-west trending faults occurring in the quartzites of the Uncompahgre Formation (Bailey 1982). Uranium and vanadium quality is comparable in the planning area. Ore bodies vary from pods and lens deposits in the Salt Wash Member to a somewhat continuous deposit in Elk Park.

Table 2-5. Annual Oil and Gas and CO_2 Production in Planning Area.

Year	Oil (barrels)	Gas (thousand ft^3)	CO_2 (thousand ft^3)
1971	346,594	31,069,658	132,690
1972	467,856*	31,658,395*	159,447
1973	678,402	35,462,107	142,813
1974	616,409	29,595,888	123,016
1975	555,849	29,218,297	229,382
1976	452,440	29,102,462	317,720
1977	398,622	30,760,888	574,087
1978	373,793	28,096,053	542,779
1979	367,486	29,658,747	678,101
1980	287,724	29,404,610	634,514
1981	444,830	30,741,365	727,930
Total	4,490,005	308,768,470	4,262,479

* Includes total production from Colorado counties in planning area, 1971 through 1981.
Source: State of Colorado 1981.

AFFECTED ENVIRONMENT--MINERALS

There are more than 66,000 unpatented mining claims in the planning area. Of these, approximately 62,000 claims are in areas of known or suspected uranium and vanadium mineralization. Production figures for these commodities within the planning area are contained in Table 2-6. It is difficult to determine what percentage of this production has come from public lands; however, a reasonable estimate would be approximately 95 to 97 percent. No production figures are available for recent years; however, the drop in uranium price, decline in exploration activity, and some mine closings are good indications that production is down. GEM Reports (GRA 8 May, 1983) have also shown possible mineralization in Sylveys Pocket area and in the Upper Bull Canyon (the Dolores River Canyon area).

Other Minerals. The Silverton area, the principal gold-producing region in Colorado today, has produced gold, silver, copper, lead, zinc, and tungsten, which may occur in veins radial to the rim of the Silverton caldera, chimneys, breccia pipes, or as disseminated and replacement deposits. The vein systems are by far the most important type of mineral deposit (Burbank and Luedke 1969; Varnes 1963) and this area is one of the more significant alteration-type deposits in the state.

In the La Sal Creek mining district, copper and silver have been produced from the Cashin and Cliffdweller mines (Sec. 22, T. 47 N., R. 19 W.). The ore deposits occur in steeply dipping fault zones that cut the Wingate sandstone and extend downward into the underlying formations (San Miguel Resource Area Unit Resource Analysis 1977).

Placer gold mining occurs along the numerous rivers and creeks whose headwaters originate in the San Juan Mountains--specifically, the San Miguel, Animas and Mancos rivers. The main interest in placer gold has been along the San Miguel River. Moderate, weekend type interest has been indicated in the Silverton area.

Table 2-6. Uranium and Vanadium Production in Planning Area.*

Year	Uranium/lb	Price/lb	Vanadium/lb	Price/lb
1973	444,472	6.00	2,610,377	1.70
1974	720,207	8.00	3,832,643	2.37
1975	694,254	10.65	4,503,105	1.87
1976	525,341	16.66	8,287,705	0.80
1977	1,516,774	18.36	11,801,283	2.04
1978	1,474,252	15.14	7,398,004	0.70
1979	1,611,422	18.74	17,181,807	1.00
1980	1,162,785	14.70	6,968,323	0.85
Total	8,149,507		62,130,447	

* 1973 through 1979.
Source: State of Colorado 1980.
Note: Data are unavailable to present date (1984).

AFFECTED ENVIRONMENT--MINERALS

Placer gold deposits commonly occur in terrace gravel deposits above water level. The placer gold deposits of the San Juans are difficult to recover due to the fineness of the flakes (thus the name flour gold). Approximately 4,000 to 5,000 mining claims are located in the Silverton area. The majority of mineral production for other minerals is being obtained from land other than public land.

The increased price of gold has caused a surprisingly low increase in exploration and production activity. Independent interest has increased as would be expected; however, large operations that originally displayed interest have dropped off somewhat. It appears that demand for base and precious metals in the planning area is relatively stable. Economics and transporation are probably the limiting factors to increased activity in base and precious metals.

Saleable

Sand and Gravel. Sand and gravel deposits of road-surfacing quality are found throughout most of the planning area along major river drainages as well as throughout some of the associated tributaries. Along the margins of major drainages, varying sizes of terrace deposits occur. In areas adjacent to the San Juan Mountains (particularly the Animas Valley), all of the gravel deposits are probably either directly or indirectly of glacial origin; small isolated deposits occur along Disappointment Creek. One rather large deposit involving public land exists approximately two miles south of Durango on Ewing Mesa; considerable interest has been expressed in this deposit.

TRAM TOWER FOR HAULING ORE FROM A NOW-ABANDONED MINE IN EUREKA GULCH NEAR LAKE EMMA (SILVERTON, COLORADO).

In the western portions of Montezuma, Dolores, and San Miguel counties, true sand and gravel deposits are either rare or non-existent. Road maintenance and upgrading are accomplished with crushed sandstone. In the Silverton area the major source of road-surfacing material has been from colluvial deposits, which consist of talus and slope wash materials.

Public lands generally do not contribute significantly (less than 10%) to sand and gravel production in the planning area and the potential generally does not exist for public sand and gravel resources contributing significantly to the local situation.

Vegetation

The San Juan-San Miguel planning area is exemplified by seven major vegetation types (see Table 2-7). Of these, three types account for 87 percent of the vegetation present--(1) pinyon-juniper woodland (60%), (2) sagebrush-grassland complex (18%), and (3) salt desert shrub (9%).

Riparian

Riparian vegetation is present throughout the planning area in association with river bottoms and other perennial and intermittent streams. Totaling less than 1 percent of the land acreage in the area, riparian vegetation still is a vital ecological component of the environment. It provides many valuable and diverse habitat features essential to many species of terrestrial and aquatic wildlife. Overall, the riparian vegetation type has a high potential for recovery and improvement following disturbance.

Sagebrush-Grassland Complex

These communities, comprising 18 percent of the total land coverage in the planning area, typify the major vegetation type in the upper valley and basin terrain that range between 5,000 feet and 7,500 feet in elevation. Large areas in this vegetation complex are classified as crucial winter range for several big game wildlife species. Higher elevation and precipitation areas with deeper soils have a good potential for recovery and revegetation subsequent to disturbance.

Salt Desert Shrub

Salt desert shrub communities constitute 9 percent of the total area and are confined to the Western basins and valleys, with elevations between 4,500 feet and 6,000 feet. These communities are characterized by soils with high salt contents and have a limited potential for vegetation production, recovery, and revegetation following disturbance.

Mountain Shrub

Mountain shrub communities comprise 3 percent of the planning area and are confined to the upper foothill zone and the lower edge of higher mountain topography. Elevation ranges between 6,000 feet and 9,000 feet. The mountain shrub type is typified by vegetation species that are important forage and cover for many wildlife species. Most mountain shrub communities are located on steep slopes within a broken topography; thus, the revegetation potential is limited.

Table 2-7. Vegetation Types and Subtypes Present in Planning Area.

Type	Acreage (percent of total vegetation)	Subtype
Pinyon-juniper woodland	599,800 (60)	Pinyon pine & juniper*
Conifer forest	52,800 (5)	Ponderosa pine, Engelmann spruce-subalpine fir, & Douglas-fir
Sagebrush-grassland	181,800 (18)	Big & black sagebrush, winterfat, short, mid, and tall grass spp.
Salt desert shrub	88,400 (9)	Shadscale, mat, & four-wing saltbush, & black greasewood
Mountain shrub	24,400 (3)	Oakbrush, mountain mahogany, serviceberry, willows, & bitterbrush
Alpine tundra	40,000 (4)	Sedges & high altitude grass spp. & forb spp.
Riparian	6,800 (1)	Sedges, rushes, willows cottonwood, alder, and birch
Total acreage	994,000	

* This figure includes 4,500 acres of aspen.
Source: BLM Data 1984.

Pinyon-Juniper Woodland

Pinyon-juniper woodland comprises 60 percent of the total land coverage and 93 percent of the forest land base in the planning area. These communities, found between 5,000 feet and 7,800 feet in elevation and containing important cover and forage values for many wildlife species, are a distinct ecosystem to be managed and perpetuated for producing multiple resource values. Large continguous blocks of operable pinyon-juniper woodland pose a reclamation problem because of the long growing rotation (150 years). Stands of poor commercial value typically occur on more marginal soils and in areas of lower precipitation, which limits the revegetation and reclamation potential (see Table 2-8).

Table 2-8. Suitable Conifer Forest and Operable Pinyon-Juniper Woodlands Within Planning Area.

Type	Acreage	Subtype
Conifer forest	13,000	Ponderosa pine, Englemann spruce-subalpine fir, & Douglas-fir
Pinyon-juniper woodland	66,500	Pinyon pine & juniper

Source: BLM Data 1984.

Conifer Forest

Conifer forest, predominately ponderosa pine and Engelmann spruce-subalpine fir, constitutes 5 percent of the total land acreage in the planning area. Ponderosa pine, found from 7,800 feet to 9,000 feet in elevation, is a valuable timber resource and also important habitat for many wildlife species. Because it occurs on deeper soils and higher precipitation areas, the reclamation potential in ponderosa pine type is good. Spruce-fir occurs from 9,000 feet to 11,000 feet in elevation. However, the high elevation and difficult access limited the use of this forest type in the past, but it is presently emerging as one of the more important timber resources.

Alpine Tundra

These communities, which provide important big-game summer forage, constitute 4 percent of the planning area and are found between 11,000 feet and 14,000 feet in elevation. Alpine tundra communities consist of many high altitude species of sedges, grasses, forbs, and shrubs. Many areas above timberline are steep, rocky, and essentially devoid of vegetation. Due to the high altitude, short growing season, and poorly developed soils, the reclamation potential in the alpine tundra type is seriously limited.

Vegetation Inventory

A vegetation inventory conducted during 1980 through 1982 classified the suitability and present ecological condition of 889,400 acres of public land for grazing in the planning area. Following site descriptions developed by Colorado's SCS, vegetation communities were placed in one of five categories (excellent, good, fair, poor, and unclassified; see Appendix Nine-G in the Draft RMP for condition ratings). Less than 1 percent of the public lands inventoried are in excellent ecological condition, 3 percent, good; 23 percent, fair; 39 percent, poor; and 34 percent remains unclassified (including all revegetated areas, some of the woodlands, and steep-rocky unsuitable lands). Revegetated lands comprise approximately 59,000 acres or 18 percent of the unclassified acres. Approximately 57,000 acres of public land were not inventoried and no vegetation condition information is available.

Vegetation condition is a classification system that groups plant communities according to the degree of successional change from the expected climax plant community. This allows for developing management objectives related to ecological conditions, but vegetation condition is not necessarily consistent with grazing use values. Fair ecological condition may represent good livestock forage condition, such as a chained area where brush and tree species have been removed to promote grasses and forbs. A climax plant community represented by excellent ecological condition may not provide better protection from soil erosion than a plant community in good ecological condition.

Threatened, Endangered, and Sensitive Plants

Federally-listed threatened, endangered, and sensitive plants were considered throughout the San Juan-San Miguel planning area in compliance with the Federal Register (Vol. 45, No. 242, December 15, 1980). The one species that is included on the Federal list of endangered plants appears in Table 2-9. The four species that are included on the Federal list of sensitive (probable threatened or endangered) plants appear in Table 2-10-A. Table 2-10-B lists the potential for occurrence of threatened, endangered, or candidate species by WSA. A baseline inventory was conducted in the summer of 1982 to identify existing and potential habitat for the endangered spineless hedgehog cactus (Echinocereus triglochidiatus).

THREATENED species with potential habitat but having no known occurrence on BLM lands in our area are:

Scientific name/Common name	Habitat
Sclerocactus glaucus/Uinta Basin hookless cactus	Gravelly flats, low hills, sparse vegetation
Sclerocactus mesae-verdae/ Mesa Verde cactus	Low clay hills & mesa sides, sparse vegetation

ENDANGERED species with potential habitat but having no known occurrence on BLM lands in our area are Pediocactus knowltonii/Knowlton hedgehog cactus--habitat--gravelly hilltops with open pinyon-juniper stands.

Table 2-9. Endangered Plants Occurring Within San Juan-San Miguel Planning Area.

Scientific plant name/ common name	Habitat
Echinocereus triglochidiatus/ Spineless hedgehog cactus	Rocky soils in open pinyon-juniper stands, flat aspects mesa tops

Source: BLM Data 1984.

Table 2-10-A. Sensitive Plants Occurring Within San Juan-San Miguel Planning Area.*

Scientific plant name/ common name	Habitat
Erigeron kachinensis/ Kachina daisy	Caves in limestone cliffs, moist crevices, with water seeps
Lupinus crassus (none)	Loose shale soils
Phlox caryophylla/ Phlox	Sagebrush slopes & flats, often on Mancos shale

* U.S. Fish and Wildlife Service candidate species, categories 1 and 2.
Source: BLM Data 1984.

Table 2-10-B. Sensitive Plants with Potential to Occur Within San Juan-San Miguel Planning Area.*

Scientific plant name/ common name	Habitat
Astragalus humillimus/ Mancos Milk-Vetch	Broken sandstone outcrops of Mesa-Verde & Picture Cliffs formations
Astragalus linifolius/ Grand Junction Milk-Vetch	Dry, clayey slopes & gullies in pinyon-juniper woodlands
Atriplex pleiantha/ Mancos Saltbush	Barren gray clay mesa slope with Phacelia demissa
Penstemon parviflorus	Pinyon-juniper-sagebrush-mountain shrub communities

* U.S. Fish and Wildlife Service candidate species, categories 1 and 2. No known occurrence.

AFFECTED ENVIRONMENT--SOILS/WATER RESOURCES

Soils

Intensive soil surveys have been conducted via interagency agreements with SCS on most of the planning area--the San Miguel Soil Survey (San Miguel, western Montrose, and central Dolores counties); the Cortez Soil Survey (Montezuma and western Dolores counties); and the La Plata County Survey (public land in La Plata County). BLM-administered land in San Juan and Archuleta counties and a small area in Rio Arriba County, New Mexico, were mapped during 1983. Detailed soil survey coverage has been accomplished with the exception of small, scattered tracts in the Pagosa Springs area.

Vegetation cover data were collected between 1980 and 1982 on approximately 347,000 acres (37% of the planning area) in the northern portion. Annual sheet erosion rates were calculated using that cover data and the Universal Soil Loss Equation (USLE). The erosion rates for these sites were then categorized as natural or slightly accelerated, moderately accelerated, and severely accelerated (see Table 2-11).

Gully erosion, recorded during the inventory, is severe in Disappointment, Paradox, and Gypsum valleys, Dry Creek Basin, Ross Fort Park, Broad Canyon, the Mud Springs area, and along some of the intermittent drainages that flow south into McElmo Creek. Localized, severe gullying and rill erosion also occurs in the Silverton area, primarily as a result of extensive ORV use, poor road maintenance, and postmining activity.

Wind erosion or soil blowing is generally not severe except in very localized situations where vegetation cover is sparse on sandy soils. The small sand dunes in Flodine Park and Yellowjacket Canyon are susceptible to severe wind erosion. Overall trends in erosion condition have not been established; they will be monitored as funding and manpower permit.

Table 2-11. Erosion Trends on Public Lands Within Planning Area.

	Erosion rates		
	Natural or slightly accelerated	Moderately accelerated	Severely accelerated
Public land acres with available data	108,611	121,430	117,243

Source: BLM Data 1984.

Water Resources

Surface Water Resources

Water Quantity. The RMP lies within two major subbasins of the Upper Colorado River Basin, the Dolores and the San Juan. The Dolores and San Juan river systems typically

experience peak flows, primarily from snowmelt, between April and June. Low flows occur during late fall and winter and are comprised mostly of ground-water discharge. The majority of the lower elevation drainages receive little annual precipitation and as a result experience intermittent or ephemeral flows. High-intensity summer thunderstorms are common occurrences throughout the planning area and often result in high peak discharges of short duration.

In Colorado, the San Juan River Basin drains approximately 5,800 square miles, 8 percent of which (or 464 sq mi) is managed by BLM's San Juan Resource Area. These major tributaries drain the Colorado portion of the San Juan River Basin--the San Juan, Piedra, Los Pinos, Animas, Florida, La Plata, Mancos, and McElmo.

Collectively, these drainages annually produce an average of 1.5 million acre-feet of water. In addition, more than 1 million acre-feet annually is diverted for irrigation, municipal, domestic, industrial, recreational, and transmountain and transbasin diversion uses. In the planning area, there are approximately 3,739 acres located in Rio Arriba County, New Mexico (in the San Juan River Basin), for which there are no water resource data presently available.

Where it leaves the RMP area, the Dolores River drains approximately 3,800 square miles; 29 percent (or 1,083 sq mi) of which is managed by the BLM Montrose District. This portion of the Dolores River Basin annually discharges an estimated 600,000 to 650,000 acre-feet of water to the Dolores River. In addition, an annual estimated average of 275,000 acre-feet is diverted for irrigation, municipal, domestic, industrial, recreational, and transbasin diversion uses. After the McPhee Dam is completed, the amount of water diverted could change significantly.

Silverton, Colorado, is presently the only municipality obtaining surface water directly from BLM land (the Boulder Gulch watershed) for a public water supply. Several other municipalities, including Nucla, Naturita, and Durango, obtain their water from major surface-water drainages whose watersheds have acreage under BLM management (see Fig. 2-2).

The water yield from public land in the planning area is quite variable, factors controlling it include soil type, vegetation type and density, elevation, slope, and the amount, duration, and intensity of precipitation.

Water Quality. Throughout the planning area, water quality varies considerably with most of the high quality water found in the higher elevations. The water quality parameters of major concern are sediment, salinity, heavy metals, and biologic pathogens. The water quality is presently managed in accordance with the Clean Water Act of 1977, Colorado State Water Quality Standards, and The Colorado River Basin Salinity Control Act of 1974.

Salinity is a growing water quality concern throughout the Colorado River Basin. Salinity concentrations in the Lower Colorado River Basin have been progressively increasing due to continued development and water use by agriculture, municipalities, and industry there. To aid in reversing this trend, BLM's present direction is to identify and control diffuse (nonpoint) salinity sources on public lands.

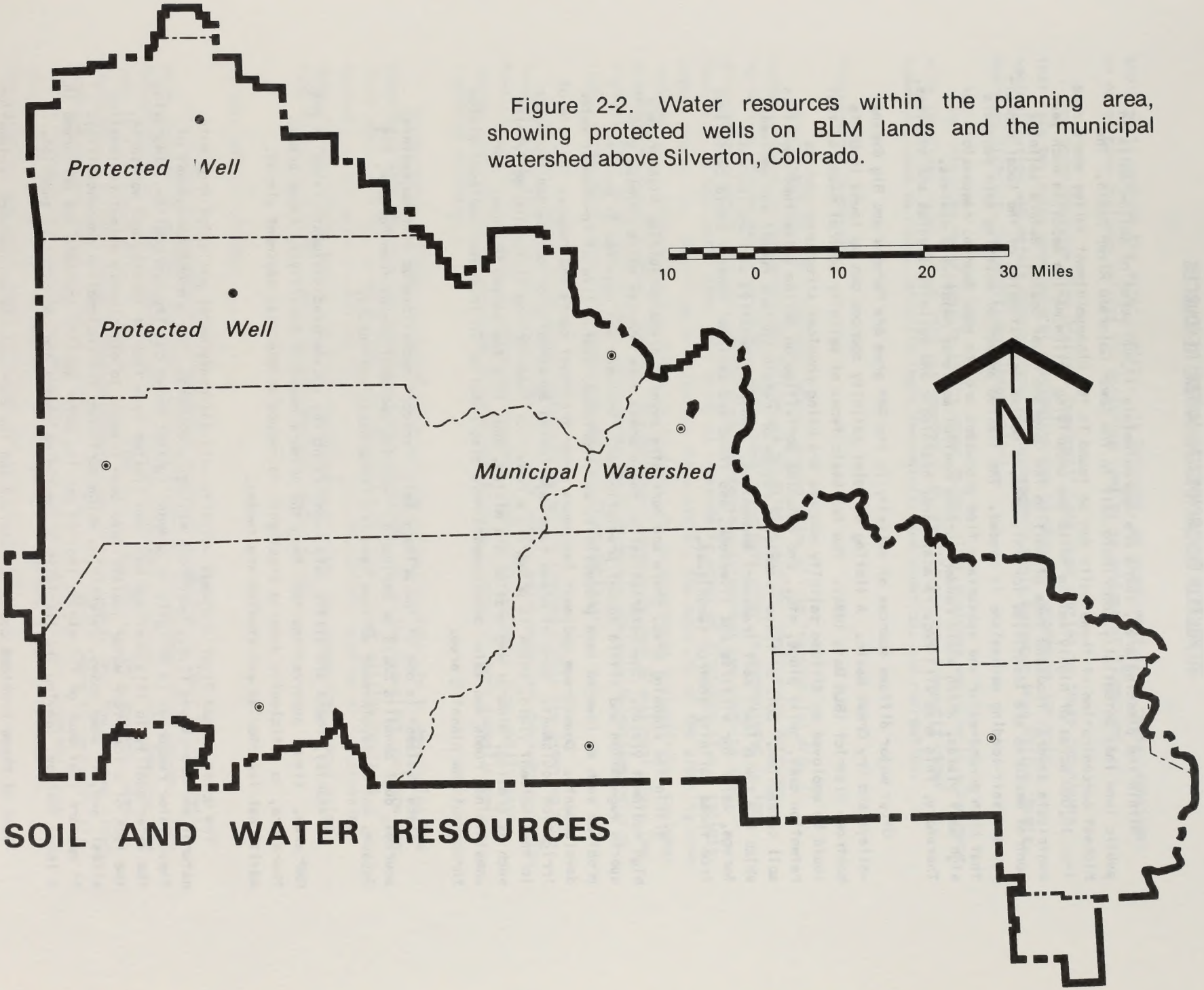


Figure 2-2. Water resources within the planning area, showing protected wells on BLM lands and the municipal watershed above Silverton, Colorado.

Within the planning area, there are approximately 17,000 acres of saline soils on public land that potentially contribute salt to the Lower Colorado River Basin. The highest concentration of these soils can be found in the Disappointment Valley where more than 16,000 acres of highly saline soils and underlying saline marine deposits each year contribute several thousand tons of salt to the Colorado River Basin. Before salinity control measures are identified for this area, a better understanding of the local hydrology and salt-loading mechanisms is needed. The limited amount of existing data suggests that both ground-water and subsurface flow processes are, to some degree, responsible for high salt yields, which would render surface control measures relatively useless. Therefore, this area will require additional hydrologic and salinity studies and analyses.

Other major diffuse sources of salinity in the RMP area are Paradox and Big Gypsum valleys and Dry Creek Basin. A listing of point salinity sources can be found in BLM's Montrose District (BLM Data 1984). The two basic types of salinity control measures that could be employed on diffuse salinity sources are using physical structures such as retention dams, gully plugs, etc., and reducing activities on saline soils that result in soil compaction. Both of these techniques reduce or retain surface runoff and sediment, which are the primary salt transport mechanisms. Indirect benefits such as increased forage, water for wildlife and livestock, and flood and sediment control could be derived from these salinity control techniques.

Within the planning area, there are currently several areas exhibiting high or very high sediment yields. Characteristically, these areas have erosive soils coupled with sparse vegetation and little annual precipitation. Sediment has resulted in on-site problems such as lowered land productivity and shortened, useful life of in-channel water developments. Downstream sediment increases water treatment costs and reduces the life of irrigation equipment. Several areas have experienced accelerated or man-caused increases in the sediment yield, which is primarily a result of land-surface disturbing activities such as grazing, mineral exploration and mining, and, in a few cases, ORV use. Both unmaintained roads and water developments have also resulted in increased sediment yields throughout the planning area.

Since sediment is one of the primary salt transport mechanisms on diffuse salinity sources, dual benefits could be derived by reducing sediment yields from Paradox, Big Gypsum, and Disappointment valleys, and Dry Creek Basin watersheds.

Presently, there are little data quantifying the accelerated sediment yields in the RMP area. Visual observations have been the primary means of identifying these areas; therefore, to efficiently develop treatments to reduce accelerated sediment yields, additional inventories and studies are needed.

The Upper Animas River drainage exhibits acid and heavy metal pollution from both natural and man-caused (i.e., hard-rock mining) processes. The present management of these water resources is strictly to prevent further water quality degradation. Improving the water quality in this drainage has been limited by a lack of funding and workforce, the lack of a long-term water quality data base (needed to efficiently select reclamation sites), and, in some cases, determining which party has the reclamation responsibility. It appears that much of the mining that is causing water quality problems was performed in a legal fashion, leaving the liability of past mine owners and operators in question.

Some of these problems could be resolved and low cost and low maintenance reclamation techniques recently developed by the Colorado Mined Land Reclamation Division could be

employed to upgrade the water quality. In Colorado, an experiment using these techniques on metal mine drainage reduced the pollution load by an average of 85 percent.

The terms "Passive Mine Drainage Treatment" have been applied to those techniques that rely basically upon natural geochemical and biochemical processes for acid neutralization and metals removal (see the Uncompahgre Basin Resource Area Office, BLM's Montrose District, for additional information).

Improving the water quality in the Upper Animas River drainage would be in accordance with the Clean Water Act of 1977 (as amended by PL 95-217) and would benefit other resources such as range, wildlife (both terrestrial and aquatic), and recreation.

Ground-Water Resources

Water Quantity. On a regional scale, ground water within the planning area is commonly found in the Dakota and Cliffhouse sandstones and the Menefee and Morrison formations (Price and Arnow 1974). More localized ground water is encountered in the alluvium associated with many of the drainage channels throughout the planning area. Generally, ground water moves from areas of recharge to areas of discharge (i.e., springs, seeps, and wells). According to Price and Arnow (1974), the majority of the planning area receives sufficient annual precipitation (>12 in.) to be considered a significant regional ground-water recharge area. However, ground-water recharge is most significant along the high mountain areas and in lower lying areas where permeable geologic formations outcrop (i.e., portions of both the Dolores and San Juan River basins).

Specific information on ground-water use is fairly limited within the planning area. Several municipalities use ground water for their public water supplies; however, only the town of Uravan, Colorado, is using ground water (via wells) directly from public land. Another well located in Dry Creek Basin on public land is used for both domestic and livestock purposes.

Ground-Water Quality. Salinity is one of the largest constraints to developing the planning area's ground-water resource. Some sandstone and marine-deposited aquifers can yield water with TDS concentrations of more than 20,000 parts per million (ppm; as a comparison, the ocean is approx. 33,000 ppm). In the northern portion of the planning area, Paradox Valley lies along a collapsed salt anticline and discharges ground water into the Dolores River containing more than 250,000 ppm, TDS.

Paradox Salinity Project

The Bureau of Reclamation is proposing to locate a portion of their Paradox Valley Unit, Colorado River Basin Salinity Control Unit, within the Dolores River Canyon. They intend to drill a test injection well in the fall of 1985 on private land. Results from this test will determine if they want to drill additional wells. This project, when implemented, is anticipated to remove 180,000 tons of salt yearly from the Dolores River. Economic damages to agricultural, municipal and industrial water users is currently $57 yearly from one ton of salt, assuming that salt concentrations in the Colorado River continue to increase by the turn of the century. The Paradox Salinity Project is projected to save water users more than $10 million annually.

AFFECTED ENVIRONMENT--WILDLIFE

Wildlife Resources

Terrestrial Wildlife

For terrestrial wildlife, BLM emphasizes habitat management determined by legal status (T&E species) or commercial value for species of interest to Federal and State agencies. Most terrestrial wildlife program funds concentrate on habitat management for big game species or for endangered species. Without funds, management strategy tries to mitigate impacts of other resource development and attempts to design other resource projects to obtain additional wildlife benefits. Unless specific problems or conflicts are identified, most wildlife species management involves mitigating actions of other resource programs to maintain or allow gradual habitat improvement. Where resources are determined to be deteriorating due to excessive numbers of wildlife and improvements in habitat cannot compensate for this in the short term, requests may be made to the CDOW to reduce wildlife populations through increasing hunting.

Big-Game Species. Mule deer (Odocoileus hemionus) and elk (Cervus elaphus) are common year-round residents in some portions of the planning area and seasonal occupants in other parts. Both species tend to migrate between forested lands at higher elevation in the spring and summer to woodlands at lower elevation in the fall and winter. Average herd densities are relatively low in summer (2-3 deer/sq mi) due to the large amount of available habitat. Winter herd densities may exceed 100 deer per square mile on some crucial winter ranges because snow depths limit habitat availability. Migration between winter and summer ranges may exceed 50 miles in this region. CDOW has documented deer migration of more than 70 miles (by marked animals).

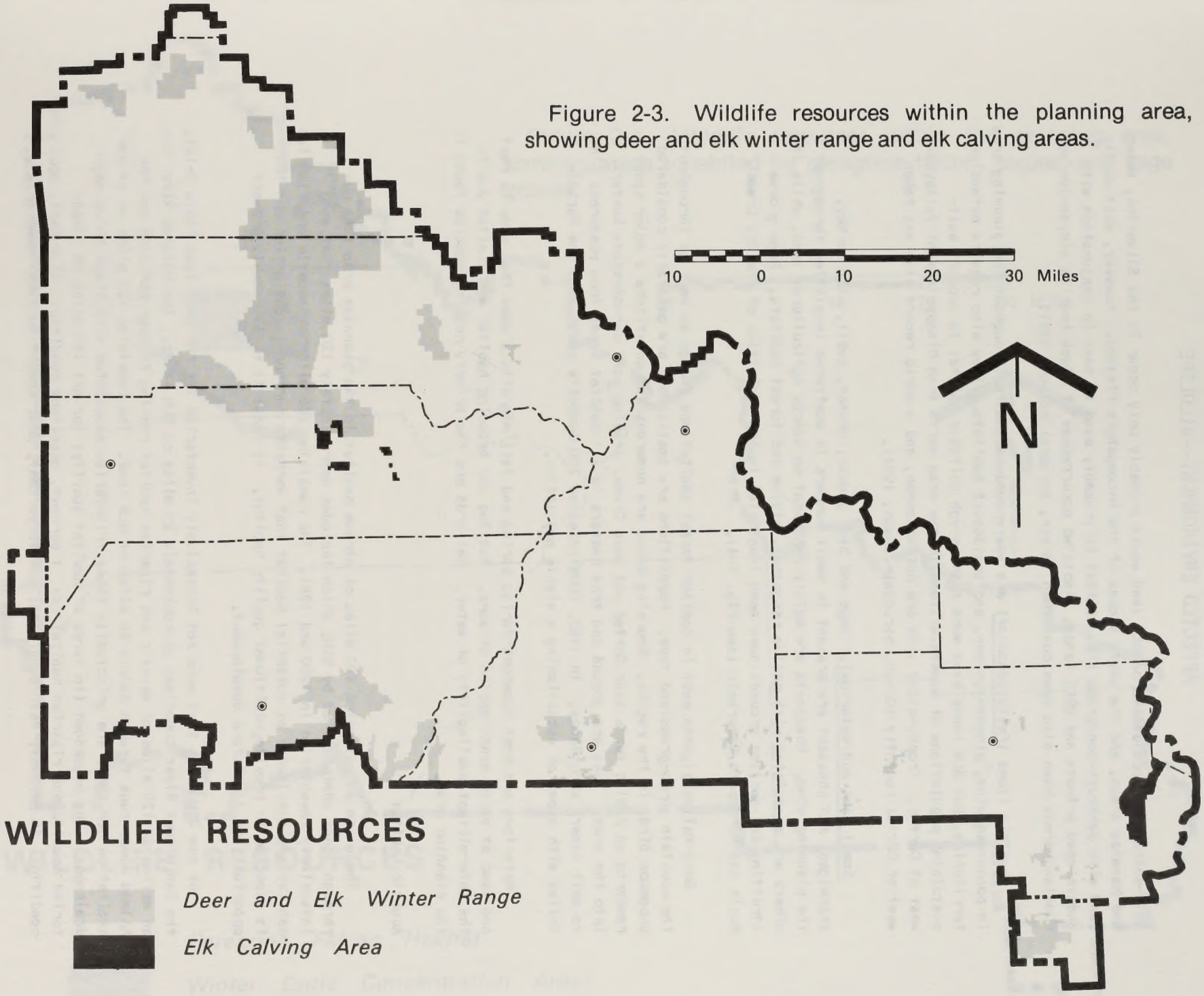
Total winter range populations on BLM-administered lands may approach 30,000 mule deer and 7,000 elk (these are maximum estimates, not averages that are used in Chapter 3) during years of severe winter weather. This estimate counts young of the year as adults because they would be foraging during the winter season. Total summer range populations on BLM lands are probably nearly 5,000 deer and 400 to 500 elk (see Fig. 2-3).

Pronghorn antelope (Antilocapra americana) have been reintroduced to the planning area by CDOW. Early releases in Disappointment and Big Gypsum valleys were only partially successful--only small bands survived in each area. Since 1979, about 150 additional antelope have been released in the Dry Creek Basin. These animals have shown a slight increase since being introduced and presently number approximately 175 head; CDOW's management objectives are to increase the herd to 300 animals.

Rocky Mountain bighorn sheep (Ovis canadensis) and introduced mountain goats (Oreamnos americanus) are found year-round in the alpine and subalpine areas near Silverton. Three other small bands of bighorn sheep occasionally migrate onto public lands near Durango, Mesa Verde, and Placerville. A band that was released on Mesa Verde National Park was later observed to have moved onto Weber Mountain. Sightings have also been reported from the Ute Reservation to the south of Mesa Verde. Some winter use occurs on scattered tracts of BLM in the Placerville-Sawpit area. Population size data are limited due to the difficulty of locating the animals and the lack of workable techniques used in taking census. Animas Mountain receives winter use by 6 to 8 bighorns that migrate south from the Hermosa Creek area in severe winters.

Black bear (Ursus americanus) are relatively common throughout the conifer forest zone in the southwest Colorado region. They require extensive territory and

Figure 2-3. Wildlife resources within the planning area, showing deer and elk winter range and elk calving areas.



self-sustaining populations on BLM land would probably only occur in the Silverton, Weber and Menefee areas, and the south slopes of the Uncompahgre Plateau. However, most public land with oakbrush-ponderosa pine habitat is probably used by bear in conjunction with undeveloped private and USFS lands. Isolated occurrences of black bear in pinyon-juniper woodland areas have also been confirmed (Gresh, personal commun. 1981).

Mountain lions (Felis concolor) are year-round residents throughout the planning area in ponderosa pine, pinyon-juniper, and semidesert habitats. They also require extensive territories, but BLM lands have more than enough suitable habitat to support self-sustaining populations of mountain lions in the area north from Disappointment Valley and west of Cortez. Trophy-sized lion are not uncommon, and a world record lion was taken west of Cortez recently (Gresh, personal commun. 1981).

Small Game and Waterfowl. Sage and blue grouse, chukar, quail, wild turkey, ptarmigan, and pheasant are present in small numbers in scattered localities throughout the planning area. Pheasants are mainly dependent on nearby agricultural land, while the others are associated with native rangeland, alpine and forest habitats. Sage grouse strutting and nesting grounds have been identified in the vicinities of the Dry Creek Basin and Miramonte Reservoir (see Fig. 2-4).

Band-tailed pigeons nest in conifer forest habitat and forage as well as throughout the mountain shrub-grassland type. Populations are small; they are generally considered uncommon birds in the region. Mourning doves are numerous and constitute a major sport resource on public lands near Cortez and Dove Creek, drawing many out-of-state hunters into the area. They are ground and tree nesters in all habitat types from ponderosa pine to salt desert shrublands. In 1983, CDOW released 200 Gambel's quail into the Paradox Valley with hopes of establishing a viable population.

Waterfowl are most numerous during spring and fall migrations when they stop to rest and feed at stock ponds and on streams. Nesting and brooding habitat are limited due to the intermittent availability of water. Mallards are the primary nesting species found in the planning area.

Aquatic Habitat

There are an estimated 400 miles of stream habitat in the planning area that run through lands administered by BLM, which includes approximately 120 miles that were intensively inventoried in 1980 and 1981. The remaining 280 miles of aquatic and riparian habitat are considered as potential habitat that warrants further investigation and that is expected to provide additional quality habitat. At least it will probably present opportunities for future development.

Of the 280 miles that were not intensively inventoried for the plan (see Table 2-12), the San Miguel River comprises approximately 25 miles on BLM lands. The Dolores River has an estimated 120 miles of aquatic and riparian habitat running through BLM land and the Animas River runs through nearly 16 miles of BLM land. The remaining 123 miles of stream habitat on BLM lands are principally those tributaries associated with these three major drainages. The breakdown (in terms of habitat quality) for all 144 miles of inventoried aquatic and riparian habitat is: 1 percent, excellent condition; 5 percent, good condition; 46 percent, fair condition; and 48 percent, poor condition (see Table 2-13).

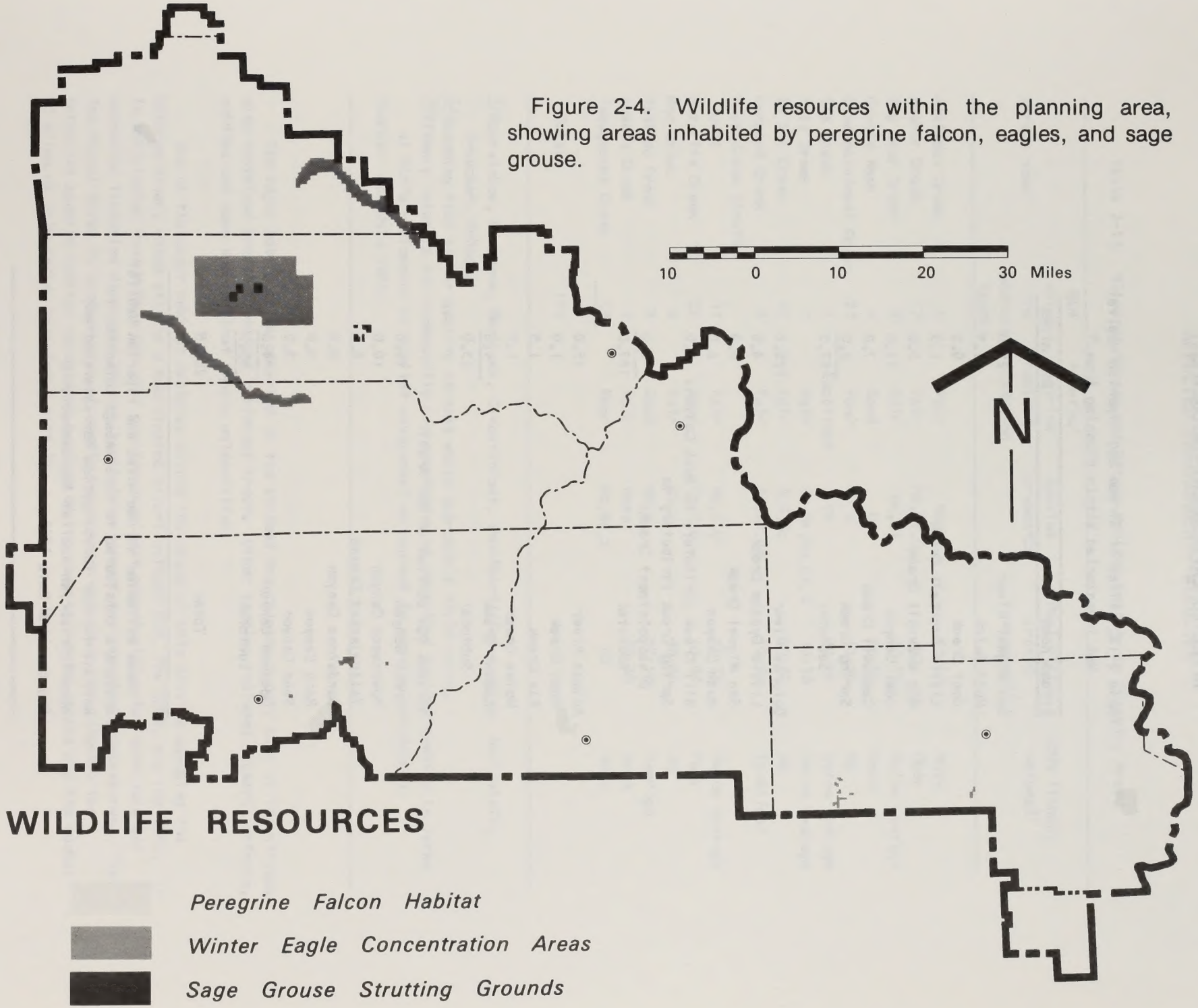


Figure 2-4. Wildlife resources within the planning area, showing areas inhabited by peregrine falcon, eagles, and sage grouse.

Table 2-12. Miles of Stream and Riparian Habitat Not Inventoried Within Planning Area.*

Stream name	BLM miles
San Miguel River	25.0
Huff Gulch	1.5
Goat Creek	0.5
Little Bucktail Creek	1.5
Big Bucktail Creek	3.0
Coal Canyon	11.0
Campbell Creek	7.0
Spring Creek	8.0
Subtotal	57.5
Dolores River	120.0
Little Gypsum Creek	4.0
San Miguel Creek	6.0
Bush Canyon	6.0
Bill Creek (tributary to Bush Canyon)	2.0
Spring Creek (tributary to Disappointment Creek)	9.0
Subtotal	147.0
Animas River	15.0
Ruby Creek	1.0
Elk Creek	1.5
Molas Creek	1.5
Cement Creek	4.0
Subtotal	23.0
Streams (SW portion of RMP Area)	
Cross Canyon	16.0
Hovenweep Canyon	10.0
Yellowjacket Canyon	8.0
Sandstone Canyon	9.0
Rock Canyon	5.0
Sand Canyon	3.0
Goodman Canyon	4.0
Subtotal	55.0
Total	282.5

* These estimated stream miles and riparian habitat areas are considered to have enough potential to warrant further investigation for watershed and aquatic/riparian habitat improvement.
Source: BLM Data 1984.

Table 2-13. Miles of Stream and Stream Habitat Quality in Planning Area.

Stream name	BLM miles (to nearest tenth)	Aquatic/ riaprian habitat condition	Species present[1/]	Pool riffle (ratio percent)[2/]	CDOW fishery values[3/]
Atkinson Creek	5	Fair	None	40:60	None
Beaver Creek	17	Fair	Rb,Ct,U	ND	Poor
Big Bear Creek	5	Fair	Bk,CT	30:70	Below average
Coyote Wash	4	Good	U	20:80	None
Disappointment Creek	22	Poor	U	10:80	ND
Elk Creek	1	Excellent	Ct	80:20	Below average
Fall Creek	7	Fair	Rb,Bk,Bn,Ct,U	70:30	Below average
La Sal Creek	12	Fair	S,D,Sc	30:70	ND
Leopard Creek	4	Fair	Rb,Bk,Ct	10:90	Excellent
Mesa Creek (South fork)	11	Fair	Rb,D,U	45:55	Below average
Naturita Creek	32	Poor	Rb,S,D	10:90	Poor
Roc Creek	4	Fair	Ct,U	40:60	ND
Saltado Creek	3	Good	Bk,U	50:50	Average
Specie Creek	2	Fair	None	70:30	None
Tabeguache Creek	15	Poor	Rb,Bn,S	ND	None
Total	144				

1/Rb=rainbow, Bn=brown, Bk=brook, Ct=cutthroat, U=unidentified species, Sc=Sculpin, S=sucker, D=Dace.
2/Assuming that higher quality streams would approach a 50:50 ratio.
3/Fishery value is not necessarily representative of potential habitat quality in terms of BLM's philosophy of habitat management as opposed to species management.
Source: BLM Data 1984.

The major game species observed in the streams was rainbow trout; some of the streams also contained brook, brown and cutthroat trout. Other species included suckers, shiners, cottids and some species that remain unidentified.

One of the major habitat features within the scope of this plan is managing the Dolores River, which will be a coordinated effort between BLM, the CDOW, and the USFS. It is anticipated that McPhee Dam will provide excellent opportunities for both cold and warmwater fisheries developed through habitat management and stocking producedures. The San Miguel River is another area of particular concern and should be targeted for intensive aquatic habitat management because of the ease of public access and the number of miles of tributaries associated with it.

AFFECTED ENVIRONMENT--WILDLIFE

Riparian Habitat

Riparian habitat associated with perennial and intermittent stream courses is especially important to aquatic and terrestrial wildlife species in the planning area. Riparian areas generally have the greatest potential (acre for acre) for producing vegetation and biomass of any habitat type. Many aquatic, semiaquatic and terrestrial species are dependent on the available water, the vegetation type that develops in riparian sites, or the extraordinary production and density of insects or other prey species. Most riparian sites are too small or narrow to have been mapped in the intensive soil inventory; riparian soils that have been mapped equal 6,800 acres, or approximately 1 percent of the total BLM acres in the planning area. Of those riparian soil sites classified by SCS's ecologic condition rating (see Glossary), most are in poor condition, with the remainder in fair condition.

T & E Species

Federally Listed-Endangered. Bald eagles (Halaeetus eucocephalus) have historically nested in the region in forested areas along rivers. The impoundment of rivers and development of storage reservoirs have created additional nesting habitat. No nest sites have been identified on public lands, but potential habitat exists in several areas (near Vallecito and Lemon reservoirs northeast of Durango and near Summit Lake, north of Mancos). One identified bald eagle nest (active in 1983; CDOW, personal commun. 1983) is within two miles of BLM land near Cortez. Three other confirmed nest sites occur within 5 to 10 miles of BLM lands near Cortez and south of Durango. Most bald eagle activity on BLM lands occurs in winter months (from November through April; see Fig. 2-4) when birds from northern states migrate into the area. Use areas were inventoried and mapped by BLM in 1979 and 1980. The largest concentration of eagles in the planning area is near the Disappointment Valley and Dry Creek Basin, where eagles exhibit opportunistic feeding behavior, taking carrion when available, and hunting rabbits and prairie dogs.

Black-footed ferrets' (Mustela nigripes) historic range included nearly all BLM lands in the San Juan Resource Area except the higher elevation lands near Silverton. Their range and potential habitat coincide with prairie dog habitat below 10,000-foot elevation. No sightings or evidences of activity have been reported in the SJRA since 1954 (in Montezuma County near Mancos). There is limited documentation on actual sighting. No intensive surveys have been conducted other than the Shell-Mapco pipeline ROW corridor surveys in 1980.

Peregrine falcons (Falco peregrinus anatum) live in the region year-round. Suitable habitat for nesting has been intensively inventoried and mapped (CDOW 1978), including sites known to have been occupied in the past, presently occupied sites, and additional sites that are suitable for expanding known habitat. At least eight such potential or known sites occur on lands that could be directly or indirectly affected by managing BLM-administered lands or subsurface minerals. Two of these three have ongoing reintroduction programs and the third is under consideration for possible reintroduction efforts (Chimney Rock, Durango, and Mesa Verde sites; Langlois, personal commun. 1983). Peregrine Falcon Recovery Team personnel (made up of various members of different Federal agencies) have indicated that long-range plans may lead to reintroductions at all potential habitat sites.

BLM is funding portions of reintroduction efforts near Durango. A total of 14 falcons have been successfully released between 1979 and 1982. At least one confirmed return of a banded peregrine was reported and numerous unconfirmed reports have been made by local ornithologists. The recovery team hopes to continue releases at this site until a wild pair becomes reestablished. A wild pair is currently established near Paradox, the CDOW is monitoring it and augmenting the natural production through nest manipulation (a series of switching maneuvers to get the birds to produce double eggs and to accept foster chicks, while wildlife biologists remove thin-shelled eggs for artificial incubation).

Peregrine populations in the region are unstable. Wild birds failed to return to one historic site at Chimney Rock in recent years, but a new pair established a nesting territory at a second site near Hermosa after a captive bird release effort attracted them.

The extreme eastern portion of the planning area and most of the Silverton area are included in the migration route of the Gray's Lake whooping crane flock (Grus americana), based on migration records (CDOW 1978) for the greater sandhill cranes (Grus canadensis tabida). The sandhill cranes are being used to foster whooping cranes in an experimental program to assist the recovery of the whooping crane species. No areas are currently designated as essential habitat in Colorado.

Spotted owls (Strix occidentalis) have been reported to occur at Mesa Verde in ponderosa pine and Douglas-fir habitat (G. Craig, CDOW, personal commun. 1983). Similar habitat sites occur on Weber and Menefee mountains, in the Dolores River Canyon, and near Durango. No inventories presently have been conducted for this species.

Both the grey wolf (Canis lupus) and grizzly bear (Ursus arctos) once occurred on the public lands in the planning area but are not presently known to exist.

State Endangered. Greater sandhill cranes once nested in the Silverton planning area in willow-lined drainages and meadows up to 9,500-foot elevation. Occupied nesting ranges have been reduced to the northwestern part of the state. No essential habitat has been designated within the planning area, but the potential exists for recolonizing suitable habitat if the greater sandhill crane subspecies expands its population in Colorado.

Wolverines (Gulo gulo) once occupied most of the densely forested mountain habitat in the state. Some animals may still occur in the Silverton area on BLM lands. No essential habitat has presently been designated.

River otters (Lutra canadensis) were known to have occurred in the Dolores and San Miguel river drainages. They require year-round open water and a minimum flow of 10 cfs and are thus limited to major waterways and lakes with an abundant fish supply. River otters have been introduced to the Piedra River by the CDOW. If the Dolores River flow is maintained at acceptable levels by releases from McPhee Dam, it would again become suitable habitat. The CDOW has done some preliminary investigations of habitat along the Dolores (Langlois, personal commun. 1983).

At one time, Lynx (Lynx canadensis) occupied nearly all alpine and subalpine forest habitat in Colorado. Parts of Eagle County and Clear Creek County are thought to be presently occupied range. The areas around Silverton are potential habitat for the species.

AFFECTED ENVIRONMENT--LIVESTOCK/WILD HORSES

Livestock Management

The planning area contains 227 grazing allotments. They cover approximately 937,000 acres of public land, with 176 permittees currently licensed to graze livestock. Approximately 57,000 acres in the planning area are currently unallotted. (See Appendix Nine-H in the Draft RMP.) Nine grazing allotments were previously covered in the Gunnison Basin-American Flats/Silverton Grazing EIS (1982).

The current active grazing preference in the area is 64,232 AUMs. By kinds of livestock, the preference is licensed as follows: cattle, 83 percent; sheep, 16 percent; and horses, 1 percent. The cattle and sheep permittees are primarily cow-calf and ewe-lamb operations, respectively. Eleven allotments covering 304,400 acres are currently under AMPs. Several of the existing AMPs still require substantial range improvements before they will be fully implemented.

Throughout any given year, licensed livestock can be found on public lands within the planning area. The majority of grazing is either spring, fall or winter use. Approximately 20 percent of all permittees also hold USFS grazing permits with most grazing on forest allotments in the summer directly from their BLM allotments.

Wild Horses

Wild horses are found in two locations in the San Juan-San Miguel planning area: Naturita Ridge south of Naturita and in the southeast end of Disappointment Valley in Spring Creek Basin (see Fig. 2-5 and Table 2-14).

Naturita Ridge Herd

The herd area is predominantly on public lands. Both forage productivity and the availability of water are currently being met predominantly on public lands. There appears to be a potential for competition for forage between wild horses, elk, and domestic livestock (primarily sheep), based on dietary studies, vegetation condition and trend, and population trends. Forage conditions presently appear to be satisfactory under current horse numbers.

Table 2-14. Wild Horse Herd Areas Within Planning Area.

	Acres			
	Public lands	(private)	State	Total
Naturita Ridge	9,270	300	30	9,600
Spring Creek Basin	27,000	7,000	1,500	35,500

Source: BLM Data 1984.

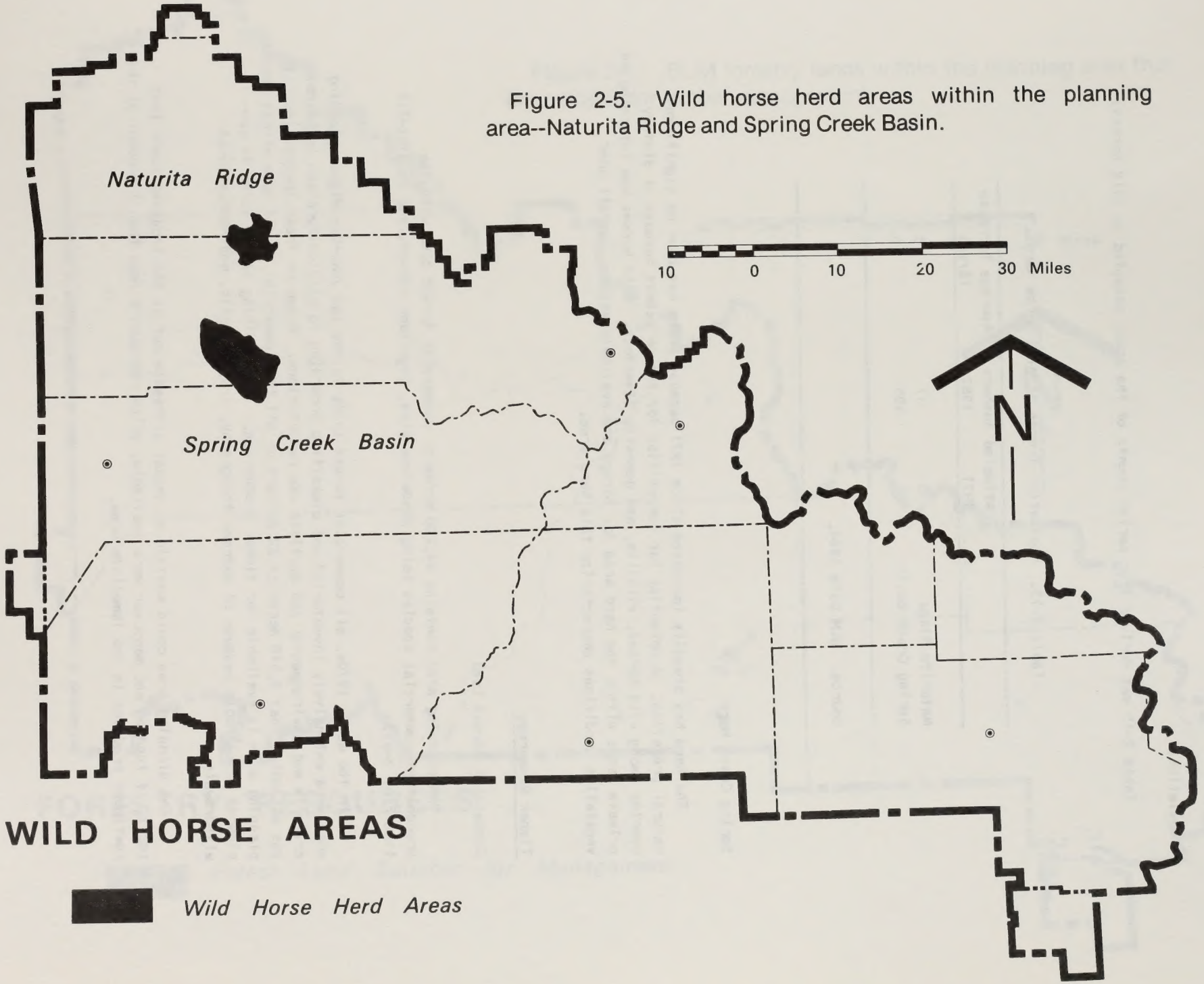


Figure 2-5. Wild horse herd areas within the planning area--Naturita Ridge and Spring Creek Basin.

AFFECTED ENVIRONMENT--WILD HORSES/TIMBER

Populations

Table 2-15 was derived from aerial counts of the areas occupied by wild horses:

Table 2-15. Population Trends of Wild Horse Herds.

	Estimated numbers 1971	1982	Average Increase (%/yr)
Naturita Ridge	8	17	5
Spring Creek Basin	24	105	6.5

Source: BLM Data 1984.

Spring Creek Herd

The herd has steadily increased since 1971 because there has been no significant natural predation. A potential for competition for forage exists because of dietary overlap among wild horses, wildlife, and domestic livestock. Wild horses use intermingled private lands within the herd area for forage and available water. Overall poor vegetation conditions characterize this herd area.

Timber Resources

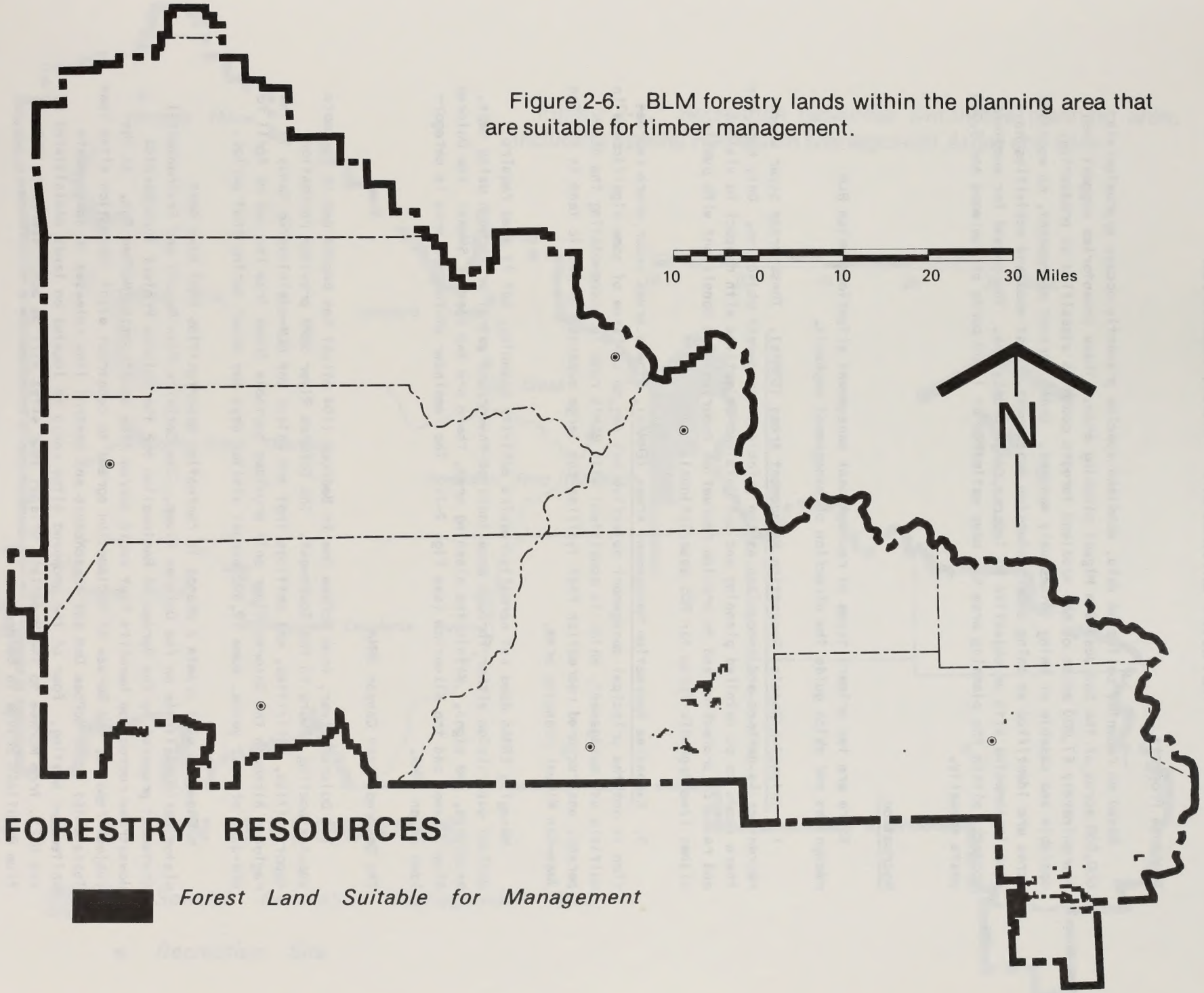
Commercial Forest Land

The planning area contains 44,200 acres of commercial forest base with the predominant commercial species being ponderosa pine, Engelmann spruce, and Douglas-fir (see Fig. 2-6).

In the early 1970s, all commercial forest lands in the San Juan-San Miguel planning area were extensively inventoried and classified according to silviculture and technical criteria and environmental and multiple use restrictions. Based on these inventories, it was estimated that 9,540 acres or 22 percent of all the commercial forest base within the planning area is available for timber production. The remaining 34,660 acres is considered nonsuitable because of extreme topography, fragile soils, and recreational withdrawals.

The planning area could sustain an annual allowable cut of 560 thousand board feet (MBF), if funding and manpower were available, which represents less than 1 percent of the sawtimber produced in the immediate area.

Figure 2-6. BLM forestry lands within the planning area that are suitable for timber management.



AFFECTED ENVIRONMENT--TIMBER/RECREATION

Woodland Products

Based on recently collected data, woodland species presently occupy approximately 600,000 acres of the San Juan-San Miguel planning area. These inventories suggest that approximately 67,000 acres of the woodland forests could be classified as productive, operable and capable of being intensively managed. Under current management, no woodland acres are identified as being under intensive management. Most woodland activities have been implemented with an objective to improve range conditions. The demand for woodland products within the planning area has been estimated at 1,000 cords of fuelwood and 3,000 posts annually.

Recreation

There are two primary types of recreational management situations which BLM recognizes and which guide the direction of management emphasis.

1. Intensive/Special Recreation Management Areas (SRMAs). These areas occur where recreation is defined and recognized as the principal management objective. Only here are there needs to do detailed planning and set detailed objectives with respect to visitor and resource protection and to provide recreation opportunities consistent with public wishes (see Appendix Three for ROS descriptions).

2. Extensive Recreation Management Areas (ERMAs). These areas occur where recreation is not the principal management objective but may be an issue of some significance in multiple use management, which is consistent with BLM's role in accommodating the dispersed, unstructured recreation that typifies the large expanses of public land in the San Juan-San Miguel planning area.

Managing ERMAs does not normally require activity planning, but it does require minimal supervision either through occasional on-the-ground patrol or through using maps, brochures, and signs. Within the planning area, there are two special SRMAs: the Dolores River Canyon and the Silverton (see Fig. 2-7). The remainder of the RMP area is categorized as an ERMA.

The Dolores River Canyon SRMA

The Dolores River, from McPhee Dam to Bedrock (104 miles) has become one of the more popular boating rivers in the Southwest. The Dolores River SRMA provides recreation opportunities, activities, and settings that are unique for BLM-administered lands in the region. Although the Dolores River only provides boatable flows from the end of April to mid-June of most years, some 12,500 annual visitor days may occur during that period.

McPhee Dam will create a change in recreation opportunities that have been historically available on the Dolores River. The Definite Plan Report and Environmental Statement prepared by the Bureau of Reclamation for the Dolores Project incorporated downstream recreation benefits that would accrue from constructing McPhee Dam. In the subject reports, the Bureau of Reclamation agreed to construct eight recreation sites (see Table 2-16) below McPhee Dam and to schedule and control flow releases to accommodate whitewater boating. Four of the proposed sites would be located on lands administered by the USFS, from McPhee to the Bradfield Bridge; four sites will be administered by BLM, from Bradfield Bridge to Bedrock.

Figure 2-7. Recreation resources within the planning area, including Special Recreation Management Areas and sites.

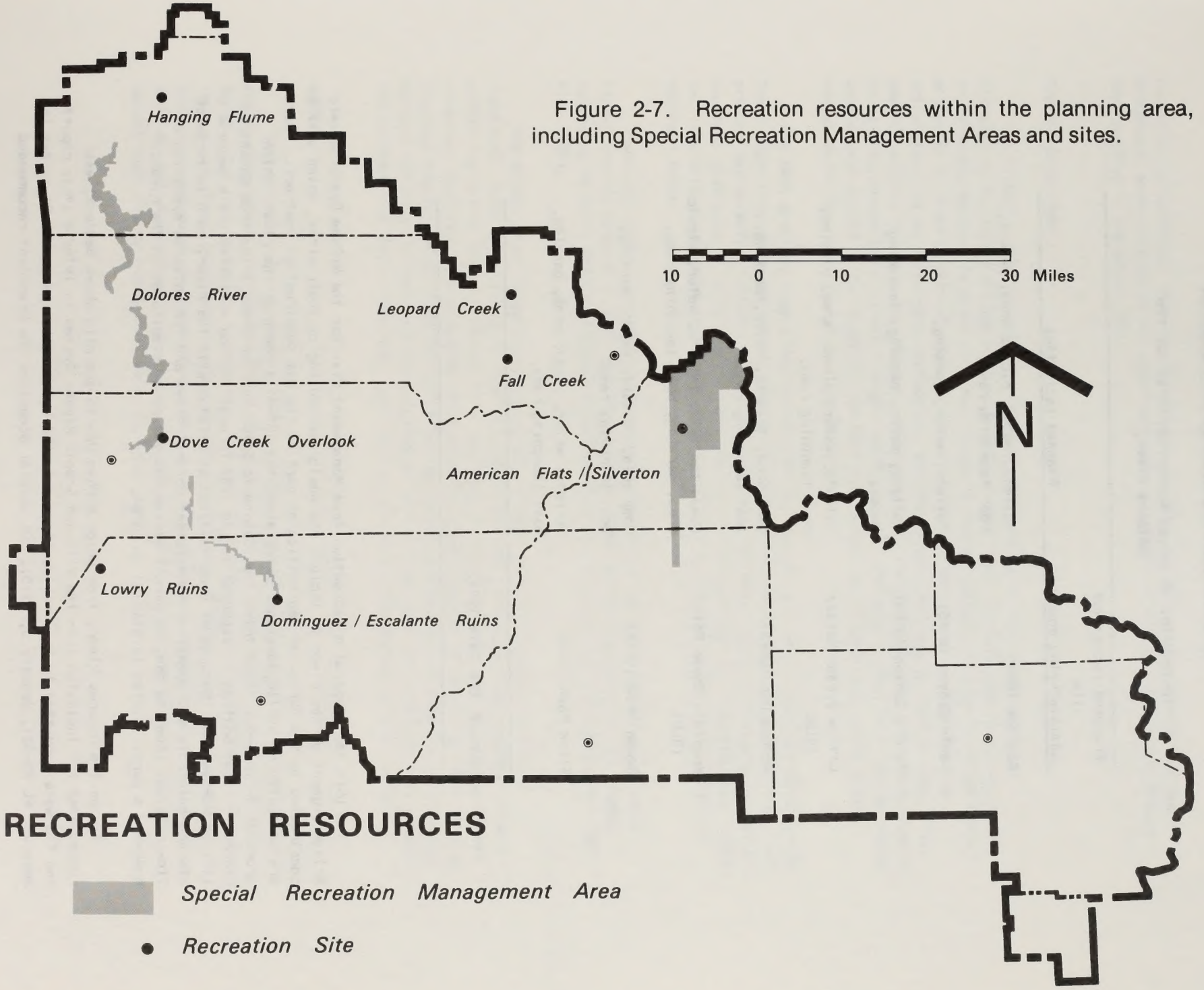


Table 2-16. Proposed Recreation Sites for the Dolores River.

Proposed recreation site (administering agency)	Planned facilities
Bedrock (BLM)	Toilets, water, picnic area, parking, boat launching ramp.
Cabin Canyon (USFS)	Toilets, water, parking.
Ferris Canyon (USFS)	Toilets, water, parking, launching beach.
Little Gypsum Valley (BLM)	Toilets, water, picnic area, parking, boat launching ramp.
McPhee Dam (USFS)	Camp area, toilets, water, parking, boat launching ramp.
Mountain Sheep Point (BLM)	Campsites (22), toilets, water, picnic area, parking, boat launching ramp.
Ryman Draw (USFS)	Camp area, toilets, water, parking, boat launching ramp.
Slick Rock (BLM)	Toilets, water, picnic area, parking, boat launching ramp.

Source: BLM Data 1984.

The USFS has prepared a Recreation Area Management Plan for the McPhee Dam-Bradfield Bridge segment of the river to include the design scheduling of their sites, which will be constructed by the Bureau of Reclamation as part of the dam construction contract. There are currently no public developed sites along the 105-mile reach of the river, which provides 2- to 3-day float trips from Cahone to Slick Rock or 5-day trips from Cahone to Bedrock. Float boating is expected during 1984 through 1986 on a limited basis because of filling McPhee Dam. Because of uncertainties associated with the river, both in terms of its unpredictable and sometimes nonexistent natural flows and the untested operation of flow releases from the dam, no permit system has yet been established on the river; however, a permit system is planned for 1984.

The entire Dolores River, from below McPhee Dam to one mile above Bedrock, was recommended for inclusion into the Wild and Scenic Rivers System in 1976; a study report and EIS were submitted to the President, as directed by the Wild and Scenic River Act (as amended, PL 93-621, January 3, 1975). On several occasions the President recommended

inclusion to Congress. However, Congress never took any designation action and the withdrawal associated with the river corridor, specified in the Wild and Scenic Rivers Act, expired in September 1981.

The Silverton SRMA

The Silverton SRMA encompasses the southern portion of the larger American Flats/Silverton SRMA (divided between BLM's Gunnison Basin and San Juan resource areas). It is unique because it provides a full range of recreation setting opportunities (from primitive to urban), with an equally wide distribution and public availability for activities such as wilderness recreation, jeeping, mountain climbing, backpacking, cross country skiing, historic and geologic interpretation, fishing, hunting, and scenic viewing on an area unparalleled in all of BLM's public lands. The area occurs in a high altitude environment (9,000 ft to 14,000 ft) exhibiting a unique and highly accessible alpine ecosystem in the heart of the San Juan Mountains.

The SRMA provides superb road accessibility, resulting from historic mining activity. These roads provide semiprimitive motorized and roaded-natural jeeping opportunities that produce approximately 437,000 annual visitor days. The area is one of the more accessible mountain environments in Colorado, featuring an attractive blend of recreation opportunity settings with a myriad of jeep roads, hiking trails, and climbs to several 13,000-foot mountain peaks.

There are no BLM developed recreation facilities within the SRMA and the informational signing program is difficult to maintain. The entire area has been designated according to BLM's ORV regulations (Gunnison Basin and the American Flats/Silverton ORV Plan 1981).

The Animas River (from Silverton to Ruby Creek) is on the Nationwide Rivers Inventory, which was created to identify potential wild, scenic and recreational rivers within the United States. Rivers that have been included on the final Nationwide Rivers Inventory list have been selected after considering the degree to which the river is free flowing, the degree to which the river and corridor are undeveloped, and the outstanding natural and cultural resource characteristics of the river and its immediate environment. The Animas River Valley has been identified as a potential National Natural Landmark.

ERMAs

The remainder of the planning area provides dispersed, unstructured recreation use and opportunities. Within the ERMAs, BLM has three sites used by the public (see Table 2-17). The Rare Snake and Lizard Research Natural Area occurs within the ERMA. Since February of 1965, this natural area has been recognized, although with varying degrees of management emphasis, as having research values. Intermittent research, primarily by local and regional educational institutions, has occurred here for several years. Evidence exists that similar research efforts will continue.

Table 2-17. ERMAs in San Juan-San Miguel Planning Area.

Site name	Investments ($)	Features	Estimated use (visitors/yr; 1983 figures)
Dolores Overlook	35,000	Picnicking, toilet, tables.	300
Dominguez-Escalante Ruins	200,000	Picnicking, archaeologic stabilization and interpretation, portable toilets, tables.	6,000
Lowry Ruin	250,000	Picnicking, archaeologic stabilization and interpretation, vault toilets, tables.	3,000

Source: BLM Data 1984.
Note: There are other sites which receive heavy use but are not developed (such as the San Miguel River). One is in the process of being acquired by the town of Placerville under the R & PP Act for development of urban recreation (playfield, fishing pond, bathrooms, picnic, volleyball, horseshoes, and day care center for kids). Leopard and Fall Creek sites have cabanas/ramada shelters and fire pits only.

Cultural Resources

Prehistoric Period

Human groups have used or inhabited the planning area during the past 10,000 to 12,000 years. They are characterized by Paleo-Indian hunters of big game; Archaic small-game hunters and gatherers; and Formative, sedentary agriculturalists, and protohistoric hunters and gatherers.

Paleo-Indian Period (B.C. 12,000 - B.C. 7500). This period represents the initial occupation of North America by big-game hunters. Lasting from 12,000 to 7,500 years ago, evidence for Paleo-Indian use of the Four Corners region is scant. Isolated or early projectile points found on multicomponent, lithic scatters have been discovered that can be attributed to this period, but no positive Paleo-Indian sites are known on public lands in the planning area. Current speculation is that the area was used on a sporadic basis by mobile groups from surrounding desert and plains regions.

Archaic Period (B.C. 7500 - A.D. 450). Hunters and gatherers successfully adapted to modern (or post-Pleistocene) environmental conditions. Their wide-ranging occupation comprises the Archaic Period. Plant resources such as pinyon nuts, berries, seeds, acorns, roots, and tubers made up the diet supplemented with small game and rodent meat resources. Their lifestyle consisted of seasonally pursuing these resources as they became available.

Camp sites and resource procurement and processing sites most commonly represent this period; both types are documented in the planning area, mainly through surface investigations. Data concerning subsistence patterns and lifestyles are based mainly on extrapolation from the Great Basin area (parts of Nevada, Utah, California, Oregon, and Idaho) where Archaic Period sites are often the focus of archaeologic research.

Formative Period (A.D. 450 - A.D. 1300). The Formative Period was characterized by people agriculturally producing primary foodstuffs and occupying villages year-round. In the planning area, the Formative Period is synonymous with the spectacular Anasazi occupation of the southern portion and the less spectacular Fremont occupation of the far northern portion of the area.

The Anasazi occupied much of the Colorado Plateau region from approximately A.D. 450 to around A.D. 1300, but their remains in the planning area represent one of their most dramatic accomplishments. The earlier Anasazi villages consisted of pit house dwellings with small surface rooms and work areas. The later Anasazi lived in aboveground pueblos and eventually moved into cliff-dwelling pueblos prior to abandoning the area.

Much work has been done in and publicized about Mesa Verde National Park; the spectacular cliff dwellings there attract both tourists and researchers. However, the Anasazi of Mesa Verde may well have been considered a rural development compared to the cultural development that took place to the west in the Montezuma Valley and on public lands in the planning area.

The northern portion of the planning area was apparently on the eastern frontier of the San Raphael Fremont area of eastern Utah. Stone structures were used for habitation and the means of supporting life were partially dependent on horticulture. Most likely, these sites possibly represent local hunters' and gatherers' efforts to imitate Anasazi and Fremont developments to the south and west.

Protohistoric Period

Occupation of the planning area during the several hundred years before the colonial and subsequent European settlement was intermittent and seasonal. Ute hunters and gatherers were the primary land users. Their occupation is evidenced by extensive tool production areas, hunting camps, and processing areas.

Historic Period

The Historic Period began in the planning area when the Spanish explorers arrived here in the 18th Century. The Escalante-Dominguez Expedition of 1776 is the best known of the explorations. Euro-Americans first permanently occupied here in the late 1800s while searching for and developing the area's vast mineral resources. The Silverton area's mining boom took off in the mid-1870s and ushered the era of mineral and railroad development that lasted into the 20th Century. Agriculture and ranching started slowly in support of the mining camp needs. The removal of the Utes in 1881 hastened the diversification of these industries by attracting ranchers and farmers to unoccupied, fertile lands.

Supply sources related to the Historic Period included mining camps and millsites; tramways; trails; railroad and irrigation apparatus; homesteads; sheep, logging, and cow camps; spring developments; and trash dumps. Mining, ranching, and agriculture continued to dominate the Historic Period until the present.

AFFECTED ENVIRONMENT--CULTURAL RESOURCES

Cultural Inventories

Approximately 178,000 acres of public land have been intensively inventoried (or approx. 18% of total planning area). More than 4,800 sites have been recorded on these lands, yielding an overall average of approximately 17 sites per square mile. The density of sites varies tremendously, however, in relation to geographic factors. One large inventory on Mockingbird Mesa resulted in more than 100 sites recorded per square mile, while other areas characterized by lower elevation shrublands or higher elevation slopes have yielded only a few sites per square mile. Some of the larger inventory projects include Class II sample inventories of the old Sacred Mountain planning area and the San Miguel planning area, Class III inventories of portions of the Durango-Chromo areas, portions of Spring Creek Mesa, the Nucla coal area, and Mockingbird Mesa and scattered Class III inventories (see Glossary) along the Dolores and San Miguel River bottoms.

Of the 4,800 recorded sites, only three (Lowry and Dominguez-Escalante ruins and the Hanging Flume) are presently on the National Register of Historic Places (NRHP). However, the majority of the remaining sites are considered potentially eligible for NRHP inclusion or require additional data for evaluating their importance. Appendix Four (see Table 4-2 for listing of NRHP sites) contains an analysis of the significant cultural sites and the NRHP criteria.

The various cultural resources exhibit their importance in various ways and in different degrees; they are highly valuable scientifically and aesthetically. Most of the sites representing varied aspects of the Anasazi culture lie in the Sacred Mountain area (primarily Montezuma and Dolores counties). They are considered both individually and collectively unique and nationally important, representing a successful and challenging adaptation to marginal environments that lasted for 800 years.

Many of the sites in San Miguel and Montrose counties are also of significant scientific value, although not as visible and structural as the Anasazi resources. Many of the sites in this area evidence activities of Archaic-type hunters and gatherers, and while these remains are scientifically valuable, they are considered less unique as BLM manages thousands of similar sites throughout the 11 Western States region. Additionally, they are not as evident or easily developed; therefore, they have less potential for public recreation interest. The most important sites in the northern portion of the planning area are very early sites, those more or less unique sites associated with an early period of agriculture in its initial stages, and those sites associated with the Fremont Period.

Another type of important cultural resource in the area is related to the historic mining period in the Silverton and Uravan-Naturita areas. Although many historically important resources are on patented land, some of these resources exist on public land, though they are largely undocumented. The Silverton area sites are related to early mining of precious minerals, while the Uravan-Naturita area is the focus of some of the earliest uranium mining in the United States.

REFUGE HOUSE WAS BUILT PRIMARILY FOR DEFENSE, WITH A HABITATION SITE LOCATED BELOW THE CLIFF STRUCTURE (SAND CANYON CULTURAL EMPHASIS AREA).

Important Cultural Sites or Areas

Based on present data, the following sites or areas (see Fig. 2-8) are considered to be of probable national importance and represent cultural resource values within the planning area (BLM Data 1984).

1. Sand/East Rock canyons (5,880 acres). Sand and East Rock canyons lie in Montezuma County and contain a large number of late Anasazi cliff dwellings that are in a good state of preservation and are unique to the planning area. Combined with the area's recreation potential, this creates an opportunity that requires special management considerations. At the head of Sand Canyon is one of the largest and best preserved Anasazi pueblo ruins in Montezuma County (Site 5 MT 765). This site received a protective mineral withdrawal in August 1984.

2. Cannonball Ruin (80 acres). Administratively withdrawn from locatable minerals and surrounded by an 8-foot high chain link fence, this large canyon head ruin on Cannonball Mesa was recorded in 1907 by Sylvannus Morley and A. V. Kidder (who became well-known, much-published archaeologists) and was partially excavated in 1908. It presently represents the only large canyon head complex ever professionally investigated. While much scientific value remains to the site, it also has potential for public interpretation.

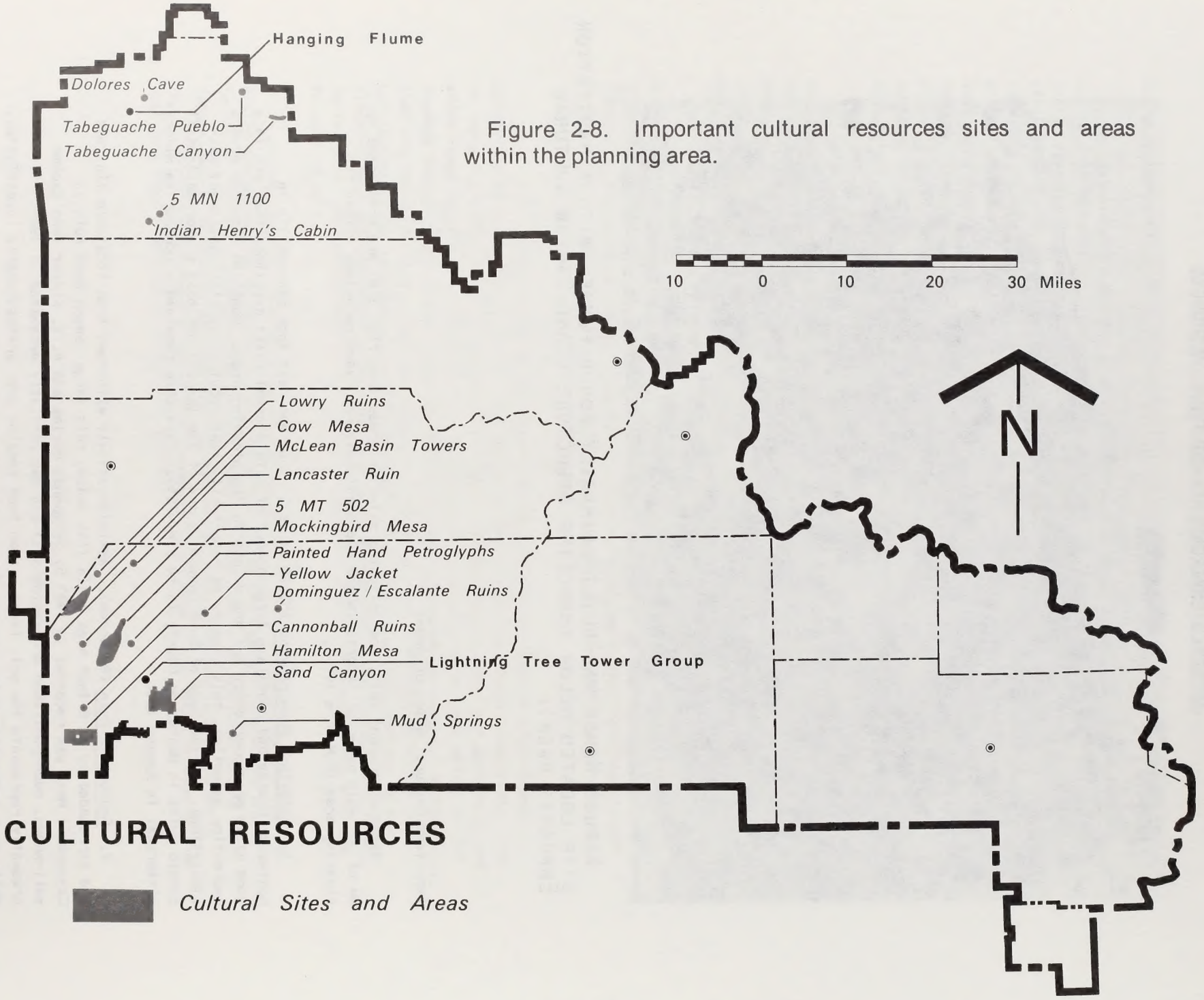


Figure 2-8. Important cultural resources sites and areas within the planning area.

3. Mockingbird Mesa (5,327 acres). Approximately 90 percent of this mesa has been intensively inventoried, with a resulting site density of approximately 100 sites per square mile (an extremely high site density area). The mesa represents prime Anasazi habitat; it was intensively occupied from approximately A.D. 600 to A.D. 1300. It exhibits a wide range of occupation and resource procurement sites that are in fairly good condition, scientifically valuable, and visually spectacular. Mockingbird Mesa is not currently protected by administrative withdrawal and has been the site of considerable CO_2 development.

This area is considered significant as a district of interrelated Anasazi sites and eligible to the NRHP under criteria (a) and (d) (see Appendix Four, Table 4-2). The sheer number of sites and evidence of their intense interrelatedness pertain to a strong agricultural affinity and makes this mesa significant to on-going research into the later phases of Anasazi community structure and intercommunity relations. The setting of this mesa top has been severely disturbed by chaining, and intrusions here have been well established since 1960. This mesa is the site of a major CO_2 development and has proven a testing ground for the success of special stipulations and the compatibility of independent cultural sites and mineral development. During the course of the development not one significant site has been directly affected by construction activity. All were avoided by special stipulations and intense monitoring with the cooperation and concern of industry. Special stipulations are also in effect here to mitigate potential impacts from increases in access and corresponding increases in vandalism to sites on the mesa top. These also have been very effective but costly. The information contained in individual sites defined by structural or artifactual perimeters is the quality which qualifies most of these sites for National Register eligibility, their setting and association having been severely damaged by previous intrusions and chaining.

As most of Mockingbird Mesa has had an intensive survey (Class III; 100%) and the remainder is scheduled for completion by 1985, individual sites have been evaluated by National Register eligibility. To date, more than 92 percent have been established as eligible or potentially eligible based on surface indications. Collectively, the mesa top is considered eligible as a district and has been identified by the Colorado Office of Archaeology and Historic Preservation as worthy of nomination. Due to lack of budget for nominating National Register sites within our agency, formal nominations have not been completed for this district. There is not a NSO stipulation for oil and gas development here because existing production wells for CO_2 are established and intrusions are wide-ranging. Special stipulations are imposed to mitigate impacts from vehicle access and vandalism and to assure individual site avoidance.

While Mockingbird Mesa is the only large mesa top area to be intensively inventoried, other similar settings (i.e., mesa top, deep eolian soils, 6,000-ft to 7,000-ft elevations) in Montezuma and Dolores counties will probably reveal a similarly intense Anasazi occupation. Other mesas where limited inventories have tended to confirm this prediction are Cow, Woods, and Cajon mesas and Squaw and Burro points.

4. Lowry Ruin (80 acres). This site is important in terms of its past contributions to the area's prehistory as well as its potential for public interpretation. Originally excavated in the 1930s by Paul S. Martin (one of the Southwest's foremost archaeologists), it has been reopened and stabilized by BLM and is currently a popular developed recreation site, protected by administrative withdrawal. Its scientific contribution lies largely in its representation of the intrusive Chaco influence that affected the 12th Century Anasazi of the area. This site is currently being evaluated by the NPS for possible future expansion.

5. Dominguez-Escalante Ruins (40 acres). These sites near Dolores are also related to the Chaco Phenomenon and have been partially excavated and stabilized (currently a prime element in BLM's maintenance stabilization program for the area). Escalante Ruin was observed and noted by Father Escalante in 1776, making it the first documented archaeologic site in Colorado. These sites, protected by administrative withdrawal and developed as recreation sites, will provide a portion of the interpretive program at the Anasazi Heritage Center.

The Anasazi Heritage Center. To be constructed by the Bureau of Reclamation and operated and managed by BLM, this center will house and manage more than one million artifacts from cultural mitigation work on McPhee Reservoir through the Dolores Archaeological Project (DAP). It will also curate artifacts and information from cultural sites on public lands through the Four Corners area. The center will offer interpretation, educational outreach, community activities, and cultural resource protection. A library will be available for the public and a research facility will assist qualified archaeologists doing scientific studies on any of the numerous cultural resource values on public lands in the planning area. The center will be located approximately 2 miles west of Dolores on Highway 184 near the Dominguez-Escalante Ruins and in the Escalante Recreation Area.

6. Tabeguache Cave II and Tabeguache Canyon (3,100 acres). This large overhang in Tabeguache Creek Canyon (a tributary to the San Miguel River) was partially excavated in the 1930s and yielded remains of three distinct cultural groups--the Archaic, Basketmaker II, and the Utes (Hurst 1945). These occupations are well defined stratigraphically from the Ute occupations (closer to the surface) to the much older Archaic occupations (deeper below the surface). These lower levels are well sealed and well preserved under later sediments, making their potential extremely high for contributing significantly to the area's prehistory.

Tabeguache Canyon contains numerous rockshelters, smaller in size, but similar to Tabeguache Cave II. They lie relatively undisturbed and present a wealth of potential scientific data (primarily prehistoric) concerning the extended seasonal use of this area.

7. Dolores Cave (60 acres). This site was also excavated by C. T. Hurst (1947) and yielded Archaic levels underneath later Ute remains. Like Tabeguache Cave II, this site also contains buried, intact deposits that may contain valuable data pertaining to the region's Archaic hunters and gatherers.

8. Bull Canyon Rockshelter (5 acres). A large prehistoric rockshelter that lies in a tributary canyon to the Lower Dolores River, the Bull Canyon overhang has never been professionally investigated. Some illegal digging in the deposits has exposed deep and potentially important cultural levels. Additionally, the cave is dry and abundant perishable material has been exposed by the illegal digging. It is likely that the undisturbed deposits not only contain similar perishable materials, but a wealth of unique and significant information.

9. Tabeguache Pueblo (120 acres). This site is a series of masonry structures, each containing several rooms. Again, C. T. Hurst excavated portions of the site (Hurst 1946). Recovered artifacts were fairly typical of the Anasazi Pueblo II period (ca. A.D. 900-1100), but the site is approximately 60 miles north of what is considered to be the northernmost periphery of Anasazi occupation, the "Anasazi Frontier" along the Dolores River. Although Hurst felt the site was an Anasazi site, it also resembles Fremont Culture sites to the northwest.

10. McLean Basin Towers (80 acres). Eleven years after Morley excavated the south pueblo at Cannonball Ruin, Jesse W. Fewkes published a work on prehistoric ruins in southwestern Colorado (Fewkes 1919). In it he briefly mentions a pair of masonry towers on a ruin located in McLean Basin, approximately 10 miles north-northwest of Cannonball Ruin--McLean Basin Towers. It is as yet unexcavated and the towers are well-preserved (approx. 11.5 ft in height). Stabilization was done in 1977, but no active research has ever begun on the site. The towers and the remains of rectangular masonry structures (administratively withdrawn) have been preserved from vandals by a chain link fence erected by BLM in 1965. The surface remains of this site indicate a Pueblo II to Pueblo III occupation with possibly a row of one-story buildings and subterranean kivas. The tower complex, which lies well away from other habitation areas, may be a strategic position within the communication network of "towers" in the Hovenweep area. Research and interpretation potential at this pristine site and in the associated area are enormous.

11. Cow Mesa (3,079 acres). Cow Mesa lies between two deep canyons covered with the ruins of the Anasazi people. Site densities are projected to be more than 100 per square mile. Many of these sites are pueblo habitations constructed during Pueblo II to Pueblo III times (A.D. 900 to A.D. 1250). Several prehistoric fields and water control systems are reported to exist in excellent condition. Many of the sites here possess structural features unobserved elsewhere. No intensive Class III inventories (see Glossary) have been done on Cow Mesa and its full potential remains unexplored.

12. Squaw/Papoose Canyon (4,611 acres). Squaw Canyon and one of its primary tributaries, Papoose Canyon, lie near the Utah/Colorado State line a few miles south of Dove Creek, Colorado. Complete inventories of these areas have never been done; however, small site-specific surveys have revealed a high number of small cliff dwellings and well-hidden masonry structures in the canyons' steep slopes and cliff faces. This area verges on the ecozone described as the northern periphery for the Anasazi and their agricultural lifestyle, explaining why such an intense prehistoric occupation and use of this area are unique and could possibly be significant. Besides scientific potential, Squaw and Papoose canyons hold a scenic beauty and ruggedness important to many recreation users who will find that such a combination of archaeologic and educational values and rugged beauty can be found in few places.

13. Painted Hand Petroglyphs (120 acres). This site, protected by an administrative withdrawal because of its unique and important cultural values, is surrounded by an 8-foot high chain link fence. It consists of a high vertical rock face that was etched by prehistoric artists hundreds of years ago. The rock art panel itself is more than 10 feet high and 50 feet long and lies in a remote region of Yellowjacket Canyon where access is limited. No inventory data presently exist for this site.

14. Painted Hand Ruin (80 acres). Painted Hand Ruin overlooks Hovenweep Canyon near Hovenweep National Monument's Cutthroat Castle Group. Similar in many ways to several of the Hovenweep sites, it possesses a well-preserved masonry tower, more than 15 feet in height. It has been evaluated for stabilization purposes and has been targeted as having a priority-one need. It receives a high level of visitation because it is near to and visible from the major access into Cutthroat Castle. Occupied continually from Basketmaker II to Pueblo III times and possessing three "painted hand" pictographs that are extremely rare to this area, Painted Hand Ruin overlooks Hovenweep Canyon with a spectacular view of Ute Mountain and the high mesas to the southeast.

15. Indian Henry's Cabin (160 acres). Located in a remote area of Bull Canyon 30 miles north of Dove Creek, this well-preserved cabin with associated corral and gravesite was the home of a locally colorful historic figure, Henry Huff, known as Indian Henry. Events in his life are documented both orally and in writing (Copeland 1980). The cabin itself is well built of ponderosa logs, rare for the area but still found high on a few north-facing slopes. Much mystery and local legend surround Henry's occupation here from 1890 to 1917.

16. Hamilton Mesa (5,018 acres). Hamilton Mesa stretches for several miles along the south side of McElmo Creek, terminating just before the creek enters Utah. This area is a marginal desert environment with a treeless appearance. The grassy mesa top of Hamilton Mesa and accompanying rincons of its drainages harbor a remarkable number and variety of successful Anasazi habitations, most of which are linked to extensive and intricate water control structures. These sites range in age from A.D. 700 to A.D. 1250. Another unique feature of the Hamilton Mesa cultural area lies in the large number of Archaic sites recorded here (B.C. 8000 to A.D. 450). No intensive surveys have been completed for this area; however, information supporting its significance comes from numerous small oil and gas and seismic surveys.

This significant area is considered eligible to the NRHP under criteria (c) and (d). Special protective stipulations may be necessary to adequately protect the great numbers and extents of Anasazi and Archaic sites here.

17. Cross/Cahone canyons (20,774 acres). Cross Canyon and one of its major tributaries, Cahone Canyon, are still largely unexplored and uninventoried. Small surveys and linear inventories spanning the area reveal a high archaeologic site density. Also unique to these canyons (because of their ruggedness and remoteness) are the large number of historic Indian and European sites. Numerous outlaw and sheep camps, Navajo habitations, and old homesteads can be found along the canyon bottoms and steep slopes. Anasazi cliff dwellings, great kivas, towers, and water control devices are numerous and isolated from access. The interpretative and scientific potential of these canyons is as yet untapped.

18. Hanging Flume (7 acres). Currently listed on the National Register of Historic Places, this wooden structure, built between 1889 and 1891, is four feet deep and six feet wide and is supported on brackets along the side of perpendicular cliffs in the canyons of the San Miguel and Dolores rivers. It was engineered to carry water to an early gold placer operation along the San Miguel River.

This site is currently listed on the NRHP. Because of the location (on a vertical cliff face) and intermittent nature of this resource, no NSO stipulations are proposed.

19. Lightning Tree Tower Group (160 acres). The Lightning Tree Tower Group is an area where research is currently taking place. It contains a variety of interrelated Anasazi sites dating from Pueblo I to Pueblo III times (approx. 700 A.D.-1350 A.D.). These sites include cliff dwellings, water control devices, rock art and shelters, habitations, food processing areas, and tool production areas. Also included is one of the tallest free-standing prehistoric towers currently recorded in the planning area. The sites in this group form a distinct and significant community complex that encompasses a time span of more than six centuries.

AFFECTED ENVIRONMENT--PALEONTOLOGY/VISUAL/WILDERNESS

Paleontology

A study (entitled Fossil Vertebrates, Invertebrates, and Plants of the Uravan Area 1982) covered a total of 70,600 acres within the planning area, centered around Uravan, and included the nearby canyons and mesas of the Uravan mineral belt and Paradox Valley. The results of the study indicated that the Morrison and Chinle formations were considered important. The Morrison Formation was found to contain eight known vertebrate localities--one was a specimen of the dinosaur Dryosaurus altus and three of the other areas contained quarryable dinosaur remains.

Another work (entitled Paleontological Inventory and Assessment of the Durango and Cortez Known Recoverable Coal Resource Areas) was completed in 1981. Results indicated that, with the exception of late Quaternary alluvium, all of the formations are known to be fossil bearing; however, only the San Jose Formation is designated as having high potential.

The flowering plant Sanmiguelia lewisii (a palm or palmlike plant, the earliest known megascopic remains of a flowering plant in the world) is found within the Dolores Formation of Triassic age (165 m.y. ago) on both sides of the San Miguel River from Saw Pit, Colorado, to approximately five miles above Placerville, Colorado, and also along both sides of Leopard Creek upstream from its junction with the San Miguel River.

Although Sanmiguelia lewisii was nominated for Federal status in 1968, it was denied by the U.S. Park Service's Historic Landmark Board. In 1980, the genus Sanmiguelia was again nominated for Historic Landmark status and was subsequently denied. However, the Landmark Board recommended that the site area be considered "sensitive" to public or private use.

Identified as a potential National Natural Landmark is the Atkinson's Mesa Uranium Field in Montrose County (T. 48 N., R. 18 W.; Sections 9, 13, 14, 23, and 24).

Visual Resources

Visual resources in the San Juan-San Miguel RMP area include some of the most diverse and spectacular scenery in the Montrose District. Approximately 96,000 acres of land were found to be important landscape areas (see Fig. 2-9), most of which were located in the Silverton area, the Dolores River Canyon and along the San Miguel River. General landscape types include broad to narrow river valleys, steep canyons, mesas, rolling parks, mountains and ridges. Vegetation ranges from desert shrub, desert woodland, mountain shrub and conifer woodland to alpine tundra.

Wilderness

Colorado's BLM Wilderness Inventory (BLM December 1980) identified eight WSAs within the San Juan-San Miguel planning area (see Table 2-18). The total acreage for all the WSAs (approx. 103,000) constitutes almost 10 percent of the San Juan-San Miguel planning area (see Fig. 2-10). A Wilderness Technical Supplement, developed with the Draft San Juan/San Miguel RMP/EIS, discusses in more detail each WSA and their alternatives and individual resources.

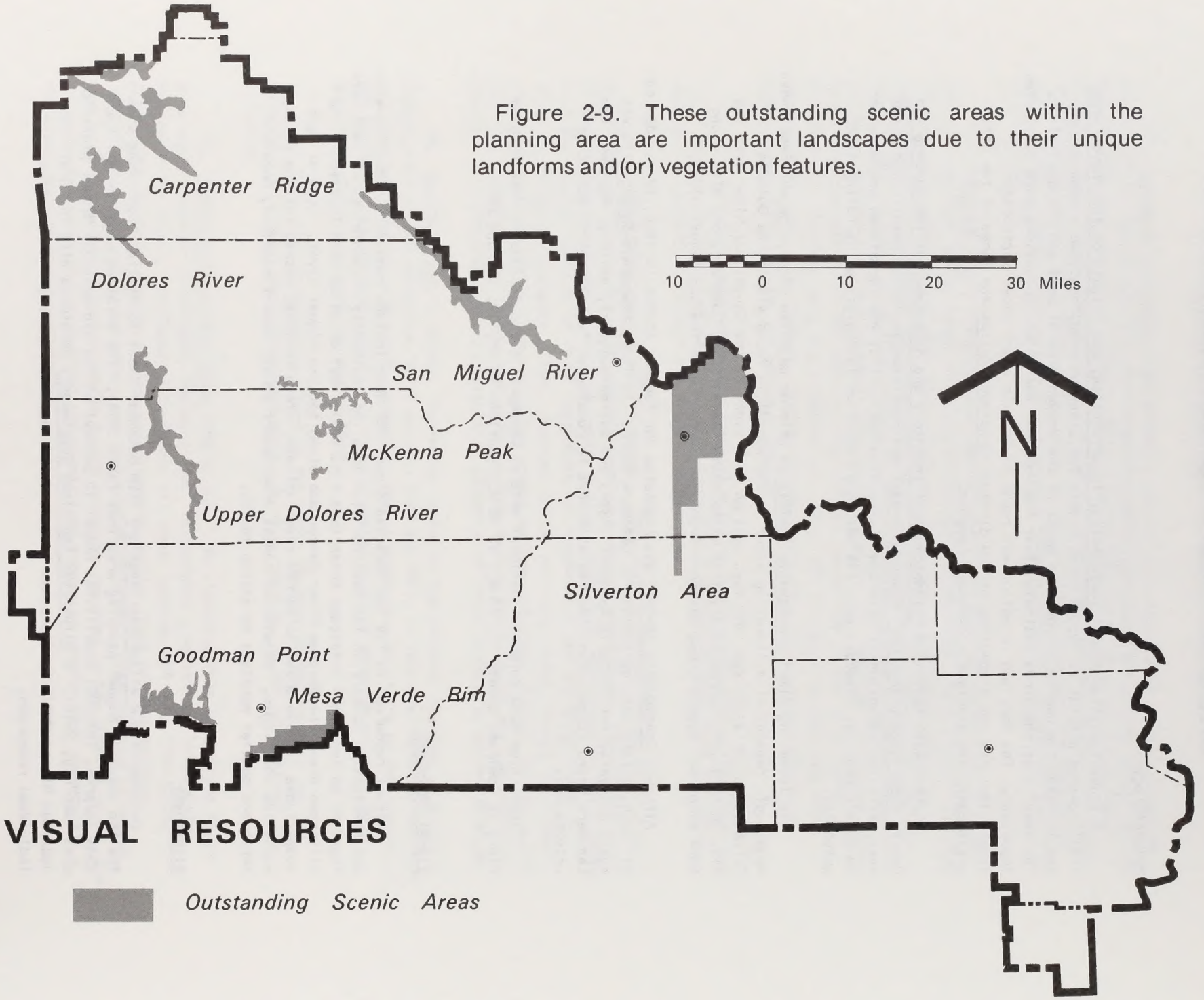


Figure 2-9. These outstanding scenic areas within the planning area are important landscapes due to their unique landforms and(or) vegetation features.

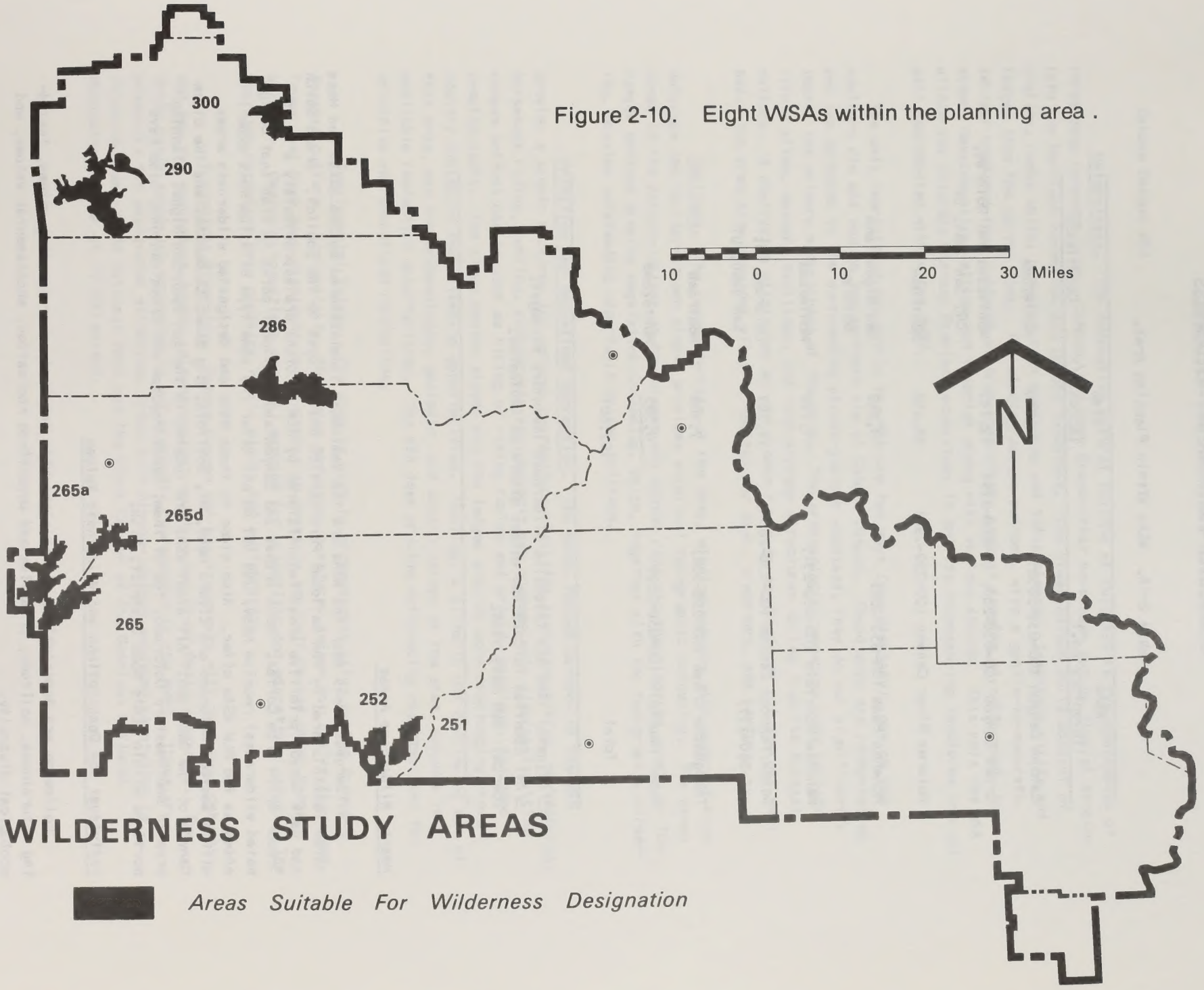


Figure 2-10. Eight WSAs within the planning area .

Table 2-18. WSAs Within Planning Area.

WSAs (Inventory no.)	Size (acres)[1/]	Counties[2/]
Cahone Canyon (CO-030-265D)	9,040	Montezuma
Cross Canyon (CO-030-265; UT-060-229)	12,742	Montezuma and Dolores, CO; San Juan, UT
Dolores River Canyon (CO-030-290)	28,630	Montrose
McKenna Peak (CO-030-286)	19,562	San Miguel and Dolores
Menefee Mountain (CO-030-251)	7,129	Montezuma
Squaw/Papoose Canyon (CO-030-265A; UT-060-227)	11,287	Dolores, CO; San Juan, UT
Tabeguache Creek (CO-030-300)	7,908	Montrose
Weber Mountain (CO-030-252)	6,303	Montezuma
Total	102,601	

[1/] Adjusted 1980 BLM Intensive Wilderness Inventory acreages.
[2/] All counties in Colorado unless otherwise indicated.
Source: BLM Data 1984.

Nearby Wilderness Areas

Wilderness areas near the WSAs are the Weminuche (administered by the USFS) and Mesa Verde (administered by the National Park Service and not open to the public). Grand Gulch and Dark Canyon primitive areas (administered by BLM in Utah) are approximately a 2- to 3-hour drive from Cortez. Both Arches and Canyonlands national parks in Utah (not designated wilderness) receive heavy use but do not offer the same type of wilderness experiences as the BLM WSAs offer. Also close to these WSAs and designated wilderness areas within western Colorado are Lizard Head, Mt. Sneffels, Big Blue, La Garita, and the Black Canyon of the Gunnison. All eight WSAs are located in the San Juan-San Miguel planning area in southwestern Colorado; two of them, Squaw/Papoose and Cross canyons, also have portions within BLM's Moab District, Utah.

Individual WSA Descriptions and Wilderness Values

Following are descriptions of the eight WSAs and their corresponding values, including naturalness, solitude, primitive and unconfined recreation, supplemental values, and ecological diversity.

Cahone Canyon WSA

Naturalness. The dominating natural feature of this WSA is the confluence of three deep canyons--Cross, Cahone, and Dove Creek--that have been cut by fluvial erosion into the Morrison Formation and Dakota Sandstone. The steep canyon walls consist of shallow, rocky soils; numerous rock outcrops; and talus slopes. Sandstone cliffs and ledges line the canyon rims. The winding canyon bottoms, with a gentle-to-moderate juniper woodland that contains a shrub understory, support growths of cottonwood, box-elder, Russian olive, willow and tamarisk along with various shrubs. This puts the WSA within the Colorado Plateau Province ecosystem; it and its accompanying landforms are not well represented within the NWPS.

The only imprints of man within the WSA are two ways (see Glossary), one on the southern rim and one on the northern rim of Cahone Canyon. These ways are revegetating and are screened by the surrounding pinyon-juniper woodland; they do not significantly impair the primary naturalness of the area. The archaeologic resources here include lithic sites, masonry dwellings, and food storage structures dating from the Anasazi culture. A cherrystem eliminates an old access route to an abandoned oil and gas well pad. The area also provides wildlife habitat for deer, predators, and raptors.

Solitude. The rugged terrain of the deep, winding canyons with numerous rock outcrops and boulder-strewn slopes provides excellent topographic screening. The dense cover of the pinyon-juniper on the slopes and canyon rims and the riparian growth in the canyon bottoms provide vegetative screening, which, together with the topographic screening, provide outstanding opportunities for solitude.

Primitive and Unconfined Recreation. The deep, rugged canyons of the WSA provide a scenic backdrop for various recreation activities including hiking, backpacking, horseback riding, hunting, photography and geologic and archaeologic sightseeing. The canyon bottoms can be used as hiking or riding routes and provide numerous, secluded camping spots. The steep canyon slopes and the ledges provide more challenging cross-country hiking or rock climbing opportunities. Hunting, a historic and continuing use of this area, and the archaeologic, geologic, and scenic values of the area, enhance the available recreation opportunities. The WSA does provide outstanding opportunities for primitive and unconfined recreation.

Supplemental Values. The area is rich in archaeologic sites dating from the Anasazi culture. Ecologically, this area serves as a natural refuge for native flora and fauna that have been displaced from surrounding areas by agriculture and other human activity. Geologic formations are well exposed for scientific and educational study. The Morrison Formation here contains fossil plants and vertebrates.

Ecological Diversity. Cahone Canyon WSA has topography with many deep canyons and has two vegetation types: pinyon-juniper woodland and Great Basin sagebrush. The Great Basin sagebrush ecosystem is not presently represented in the NWPS. There are presently two designated wilderness areas with pinyon-juniper woodland vegetation in Colorado (Mesa Verde National Park and the Black Canyon of the Gunnison National Monument--a total of 20,000 acres).

Cross Canyon WSA

Naturalness. The WSA consists of portions of several canyons, including Cross, Ruin, and Cow canyons, which have been cut by fluvial erosion through an uplifted sedimentary bed. Numerous rock outcrops, ledges, and cliffs are exposed in the canyons which range in depth from 340 feet to 850 feet. In addition to the main canyons, there are numerous smaller tributary canyons. Pinyon-juniper woodland, the dominant vegetative cover with cottonwoods in places along the canyon bottom, together with Great Basin sagebrush, place this WSA within the Colorado Plateau Province. This ecosystem and its accompanying landforms (see Solitude) are not well represented within the NWPS. Primarily natural in character, imprints of man within the WSA consist of three ways, one of which has been blocked off to allow revegetation while the other two are mainly vehicle tracks. There are heavy concentrations of archaeologic and historic resources found in this WSA; it also provides wildlife habitat for deer, predators, and raptors.

Solitude. The rugged canyons with their narrow, steep inner gorges and numerous side canyons within a dense pinyon-juniper woodland provide excellent topographic and vegetative screening. The canyon bottom has a riparian zone which supports a mixture of cottonwood, willow, tamarisk, boxelder, and shrubs. The enclosed nature of the canyon system provides a feeling which enhances outstanding opportunities for solitude.

Primitive and Unconfined Recreation. The Cross Canyon WSA offers a variety of primitive and unconfined recreational opportunities such as hiking, backpacking, horseback riding, hunting, and photography. The canyon bottoms within the WSA provide foot or horseback routes and numerous, secluded camping sites. More challenging cross-country routes can be found on the canyon slopes and walls. From the mesa or cliff top, there are scenic panoramas of the Cross Canyon WSA and surrounding areas. This area provides outstanding opportunities for primitive and unconfined recreation.

Supplemental Values. The area is rich in archaeologic sites dating from the Anasazi culture. Ecologically, this area serves as a natural refuge for native flora and fauna that have been displaced from surrounding areas by agriculture and other human activity. Geologic formations are well exposed for scientific and educational study. The Morrison Formation here contains fossil plants and vertebrates.

Ecological Diversity. Cross Canyon WSA has the same ecological diversity as Cahone Canyon WSA (see previous discussion).

Dolores River Canyon WSA

Naturalness. The center of this WSA is the deeply incised, meandering Dolores River Canyon; it also includes those tributary canyons and surrounding rimlands that are primarily natural in character. This rugged canyon system is cut down through a series of sedimentary strata resulting in many colorful ledges and massive cliffs interspersed with talus slopes. Approximately 30 miles of the Dolores River are included within the study area. Vegetation, which varies with terrain and elevation, includes a rim and mesa area that supports a pinyon-juniper woodland with occasional sage parks. On the canyon slopes a mixture of desert shrubs such as sagebrush, Mormon tea, squawbush, and buffalo berry are found. Scattered pinyon-juniper, cottonwoods, and an occasional ponderosa pine lie just under the canyon rim. The main canyon bottom and some of the tributary canyon support a thicker riparian growth. Some small enclaves of aspen and ponderosa pine are found within the WSA.

The WSA also contains ecological values (unique plants, including Kachina daisy and Eastwood monkeyflower; see Vegetation section) and archaeologic and paleontologic resources (including petroglyphs and pictographs along the canyon walls; see Glossary). It falls within the Colorado Plateau Province ecosystem because of its pinyon-juniper woodland and Great Basin sagebrush, an ecosystem with its accompanying landforms (see Solitude) that is not well represented within the NWPS. Deer, raptors, and other wildlife also find a unique habitat within the WSA.

Solitude. The deep, narrow, and extremely rugged Dolores River Canyon and its tributaries offer extensive topographic screening. The main canyon consists of twisting meanders with steep, often sheer walls and rock outcrops, ledges and talus fields with large boulders. Tributary canyons are often narrow, sheer walled and full of boulders. On the mesa tops and benches, pinyon-juniper woodland provides vegetative screening. The topographic and vegetative screening in certain locales provides outstanding opportunities for solitude here.

Primitive and Unconfined Recreation. During the spring runoff, the Dolores River provides a scenic whitewater river run. Throughout the year, the rugged canyon system offers opportunities for challenging cross-country hiking and backpacking, while numerous high cliffs provide outstanding rock climbing opportunities. Other available recreational activities include hunting, horseback riding, photography, and geologic sightseeing. The highly scenic canyon system enhances all of the available recreation activities. The Dolores River Canyon WSA provides outstanding opportunities for primitive and unconfined recreation.

Supplemental Values. The Dolores River Canyon WSA contains a number of supplemental values including geologic and scenic values associated with the deeply entrenched, sheer walled canyons an the exposed sedimentary strata; ecologic values including relic areas and rare plants; and archaeologic, historic, and paleontologic values.

Ecological Diversity. The Dolores River Canyon WSA is associated with deep canyons in the Colorado Plateau ecoregion. Two primary vegetation types are present: pinyon-juniper woodland and Great Basin sagebrush. (See Cahone Canyon WSA narrative for designated wilderness areas in these ecosystems.)

McKenna Peak WSA

Naturalness. The geomorphology of the area is dominated by a shale and adobe badlands topography and includes sandstone cliffs, canyons, and rolling hills. Vegetation varies from desert forbs and grasses to dense coniferous forests. McKenna Peak WSA is within a transition zone between the mountain mahogany-oak scrub, pine and Douglas-fir, pinyon-juniper of the Rocky Mountain Forest Province and the pine and Douglas-fir, pinyon-juniper and saltbush-greasewood of the Colorado Plateau Province.

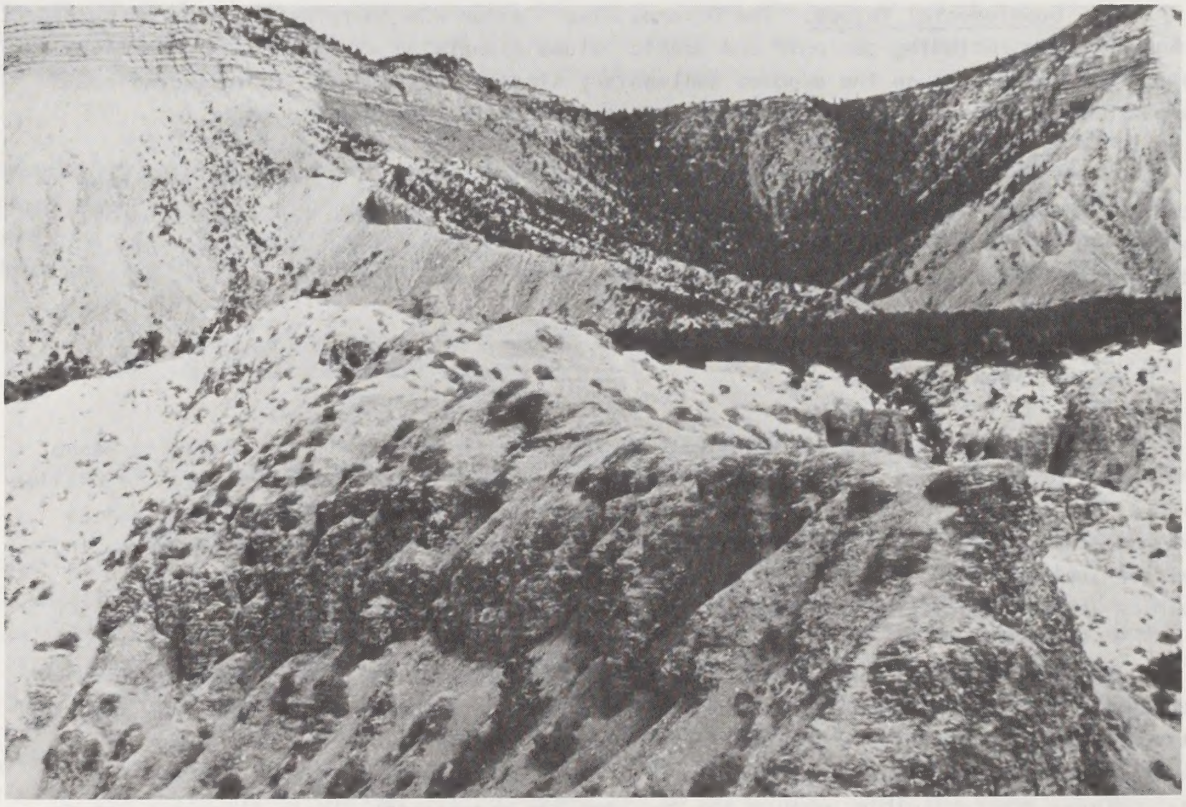
Imprints of man in the McKenna Peak WSA are not substantially noticeable and are mitigated by either topographic or vegetative screening or both. This ecosystem and its accompanying landforms (see Solitude) are not well represented within the NWPS. In addition, the cumulative impacts of the ways and range improvements upon the unit's naturalness are negligible because the few imprints present are widely dispersed and do not dominate the landscape. This WSA also provides a partial habitat for a wild horse herd and large herds of wintering deer and elk. A large number of marine fossils cover the ground here.

Solitude. The combination of vegetation and topographic screening provides outstanding opportunities for solitude in the McKenna Peak WSA. The badlands near McKenna Peak and Brumley Point contain deep, narrow, twisting arroyos. From high points in the WSA, there are expansive vistas that give a feeling of vastness to the area. Dense pinyon-juniper woodland and rock outcrops provide screening in the northern part of Spring Creek Basin (the northern portion of the WSA).

Primitive and Unconfined Recreation. The diverse topography of the McKenna Peak WSA, including badlands, steep sandstone cliffs, and gently rolling mesas in combination with varied vegetation, provide outstanding primitive and unconfined recreation opportunities, some of which include horseback riding, hiking, rock climbing, backpacking, hunting, photography, and sightseeing.

Supplemental Values. The area contains unique scenic values due to the unusual geomorphology of the landscape and unspoiled scenic vistas of the surrounding lands. Numerous marine fossils are found within the WSA and in the western portion a wild horse herd is also found.

Ecological Diversity. McKenna Peak WSA is within a unique ecosystem type area--it occupies a transition zone between the Colorado Plateau and the Rocky Mountain Forest provinces with three vegetation types. The saltbrush-greasewood ecosystem is presently represented by one designated wilderness in Colorado (Great Sand Dunes National Monument--a total of 18,000 acres). The mountain mahogany-oak scrub ecosystem is presently represented by one designated wilderness in Utah (Lone Peak--a total of 30,000 acres). McKenna Peak WSA also has a pinyon-juniper ecosystem (see Cahone Canyon narrative).



McKENNA PEAK WSA AND ASSOCIATED BADLANDS TOPOGRAPHY.

Menefee Mountain WSA

Naturalness. The Menefee Mountain WSA, with topography composed of mountains and canyons, is primarily natural in character. It contains a number of features such as vertically walled canyons, overhanging cliffs, and varied plant communities. Pinyon-juniper and various mountain shrubs constitute the primary vegetation; at higher elevations, pinyon-juniper gives way to oakbrush, the dominant species above 7,000 feet. Scattered stands of ponderosa pine and Douglas-fir can also be found associated with the oak habitat. This WSA is within a transition zone between the Rocky Mountain Forest Province and the Colorado Plateau Province. Neither ecosystem nor their accompanying landforms are well represented in the NWPS.

Only minor imprints of man are found within the WSA; most of them are ways in the northern portion and within East Canyon. Small, old coal mines are substantially unnoticeable and are effectively screened by topography and vegetation. There is a deteriorating log cabin near the mouth of Joe's Canyon and a fence line largely screened by vegetation. A small, unnoticeable stock reservoir is located within the southern portion. None of these imprints has adversely affected the natural character of the land. The WSA is located four miles east of Mesa Verde National Park and includes several archaeologic sites. Wildlife habitats include those for bald and golden eagles, deer, elk, bear, and mountain lion.

Solitude. Because of the rugged topography and the vegetative screening inherent to pinyon-juniper and oakbrush habitats, this WSA has outstanding opportunities for solitude. The presence of numerous canyons tends to disperse use, which also contributes to outstanding opportunities for solitude.

Primitive and Unconfined Recreation. The rugged terrain of the unit (steep-sided canyons and cliff-rimmed mesa tops) provides challenging hiking, backpacking and climbing opportunities. From the top of Menefee Mountain, panoramic vistas exist, including several surrounding mountain ranges and a series of plateaus. These vistas provide opportunities for sightseeing and photography and enhance the other recreation opportunities available in the WSA, providing outstanding opportunities for primitive and unconfined recreation.

Supplemental Values. The area contains habitat for both bald and golden eagles, elk, and deer. Archaeologic sites are found within the area, as well as some small, historic coal mines.

Ecological Diversity. Menefee Mountain WSA is located in a transition zone between the Colorado Plateau and Rocky Mountain Forest provinces and has two associated vegetation types: pinyon-juniper woodland and mountain mahogany-oak scrub. (See the Cahone Canyon WSA and McKenna Peak WSA narratives for details on designated wilderness areas in these ecosystems.)

Squaw/Papoose Canyon WSA

Naturalness. The WSA consists primarily of Squaw and Papoose canyons that have been cut by fluvial erosion into an uplifted sedimentary bed composed of the Morrison Formation and Dakota Sandstone. Because of the arid nature of this area, the canyon slopes are composed of exposed rock outcrops and steep talus slopes. Numerous tributary

canyons merge juniper with an associated shrub understory of sagebrush, Mormon tea, mountain mahogany, rabbitbrush, cliffrose, and bitterbrush. This pinyon-juniper woodland and Great Basin sagebrush place the WSA within the Colorado Plateau Province, an ecosystem with its accompanying landforms (see Solitude) that are not well represented within the NWPS. Vegetation is thicker along the canyon floors with a mixture of cottonwood, tamarisk, saltbush, sedges, rushes, and cattails.

Within Squaw Canyon in the Colorado portion of the WSA, an old fence line that was bladed during construction is returning to a natural condition through revegetation and erosion. The surrounding pinyon-juniper forest provides screening, making this impairment only noticeable nearby. The WSA is primarily natural in character with the imprints of man's work substantially unnoticeable. It contains rich archaeologic resources, including lithic sites, masonry dwellings, and food storage structures dating from the Anasazi culture. The WSA also provides wildlife habitat for deer, predators, and raptors.

Solitude. The rugged topography of the steep, winding Squaw and Papoose canyons provides topographic screening within this WSA. Steep inclines and ledges limit accessibility and the meandering stream course provides natural visual barriers. Vegetative screening is provided by the pinyon-juniper on the canyon slopes and by the riparian growth in the canyon bottom. Because of the vegetative and topographic screening, outstanding opportunities for solitude are available here.

Primitive and Unconfined Recreation. Some of the outstanding primitive and unconfined recreation opportunities available are hiking, backpacking, hunting, rock climbing, horseback riding, and photography. The secluded canyon bottoms make good hiking or riding paths, while the canyon slopes and walls provide more challenging routes for hiking and rock climbing. The rugged and scenic terrain, diverse wildlife, and archaeologic sites enhance the available recreation opportunities.

Supplemental Values. The area is rich in archaeologic sites dating from the Anasazi culture. Ecologically, this area serves as a natural refuge for native flora and fauna that have been displaced from surrounding areas by agriculture and other human activity. Geologic formations are well exposed for scientific and educational study. The Morrison Formation here contains fossil plants and vertebrates.

Ecological Diversity. Squaw/Papoose Canyon WSA is associated with pinyon-juniper woodland and Great Basin sagebrush ecosystems. (See Cahone Canyon WSA narrative for details on designated wilderness areas in these ecosystems.)

Tabeguache Creek WSA

Naturalness. With its center Tabeguache Creek and the creek's deep canyon, the WSA is characterized by ridges and mesas divided by rough tributary canyons. Except for the riparian zone along Tabeguache Creek, pinyon-juniper woodland is the dominant vegetation.

The WSA contains educational, scientific, and unique archaeologic values. Archaeologic sites are found within this area--probably both Fremont and Ute Indians--as this canyon served as a trail over the Uncompahgre Plateau. It falls within the pinyon-juniper woodland of the Colorado Plateau Province, an ecosystem with its accompanying

landforms (see Solitude) that are not well represented within the NWPS. The WSA also contains a unique habitat for deer, elk, black bear, raptors, and snakes.

Solitude. Outstanding opportunities for solitude are available in the WSA because of the topographic screening provided by the winding, narrow Tabeguache Creek Canyon and the surrounding rugged benchlands and tributary canyons, which cover most of the area. The WSA contains outstanding opportunities for solitude.

Primitive and Unconfined Recreation. The scenic quality of Tabeguache Canyon, combined with the perennial stream, provide outstanding opportunities for hiking, backpacking, and horseback riding. The benchlands above the canyon offer more challenging travel routes. Hunting, photography, and geologic sightseeing are other available recreation opportunities. The WSA contains outstanding opportunities for primitive and unconfined recreation.

Supplemental Values. The area, which contains a variety of geologic, educational, scientific, and archaeologic values, is also a natural refuge for wildlife.

Ecological Diversity. Tabeguache Creek WSA is associated with the pinyon-juniper woodland ecosystem. (See Cahone Canyon WSA narrative for details on designated wilderness in this ecosystem.)

Weber Mountain WSA

Naturalness. This WSA, immediately west of Menefee Mountain, consists of numerous canyons that radiate from a linear-shaped mountain. Exposed sandstone forms overhangs and vertical cliffs along the slopes of the mountain and within the canyons. The vegetation consists primarily of pinyon-juniper with areas of sagebrush interspersed throughout and some conifers and scrub oak near the mountaintop.

The unit is pristine in character with only one minor imprint within the center--an old, dry reservoir that has been revegetated and is returning to its natural condition. The area is free of any substantial imprint of man. The archaeologic resources have been largely unexplored.

Weber Mountain WSA is in the transition zone between the Rocky Mountain Forest Province and the Colorado Plateau Province; neither ecosystem nor their accompanying landforms are well represented in the NWPS. Weber Mountain WSA also contains important wildlife habitats for deer, elk, bighorn sheep, bear, mountain lion, and raptors.

Solitude. Due to Weber Mountain's rugged topography and its associated drainages and vegetative screening (provided by dense stands of pinyon-juniper and scrub oak), it possesses outstanding opportunities for solitude. The mountain's configuration and limited access into the WSA provide a sense of remoteness and seclusion which also contributes to feelings of solitude.

Primitive and Unconfined Recreation. The Weber Mountain WSA possesses outstanding opportunities for primitive and unconfined recreation. Its rugged terrain provides hardy challenges to the hiker, explorer, and climber; supplemental values within the WSA such as panoramic vantage points, wildlife, and archaeologic sites enhance the various recreation opportunities. Lack of water in the unit is a limiting factor, yet a number of activities can still be pursued, such as photography, hunting, and sightseeing.

Supplemental Values. The area, which contains habitat for both bald and golden eagles, bighorn sheep, and deer, also possesses archaeologic sites. A portion is contiguous to Mesa Verde National Park.

Ecological Diversity. Weber Mountain WSA is located in a transition zone between the Rocky Mountain Forest and Colorado Plateau provinces. Vegetation types associated with it are: pine-Douglas-fir forest and pinyon-juniper woodland. The pine-Douglas-fir forest is presently represented by ten designated areas (263,000 acres). (The Cahone Canyon WSA narrative discusses the pinyon-juniper woodland ecosystem.)

Manageability Concerns

Table 2-19 outlines current manageability questions for the WSAs.

Lands

Land Ownership and Use

The San Juan-San Miguel planning area consists of approximately 994,000 subsurface and surface acres of public lands and 297,000 acres of subsurface mineral estate. Table 2-20 lists counties within the planning area, their county seats, and their corresponding public land acreage. Following is a discussion of lands within the planning area, made up of four sections.

Northwest Section. Approximately 70 percent of the public land is in the northwest portion of the planning area. It stretches east from the Colorado-Utah State boundary and is bordered on the other sides by solid blocks of national forest lands--the Manti-La Sal National Forest to the northwest, the Uncompahgre National Forest to the north and southeast, and the San Juan National Forest to the southwest.

The historic patenting of mining claims and homesteads has influenced the land ownership pattern in this section; interspersed private lands in this area lie principally along the major drainages, which run predominantly northwest to southeast--the Dolores River and Paradox, Gypsum, and Disappointment creeks.

The small communities of Uravan, Naturita, and Slickrock are surrounded by Federally owned lands; the settlements at Paradox, Redvale, Norwood, Egnar, Bedrock, Dove Creek and Cahone are located in areas of consolidated private ownership.

Southwest Section. BLM-administered public lands are in the western part of this portion of the planning area and are increasingly scattered to the east. Bordered on the west by the Utah State line, public land runs along steep canyons and mesas (i.e., McElmo, Sandstone, Woods, Yellowjacket, Sand, and Goodman canyons). To the south lies the Ute Mountain Ute Indian Reservation and to the east, Cortez, the county seat of Montezuma County. East of Cortez, a few tracts of BLM lands border Mesa Verde National Park and the Southern Ute and Ute Mountain Ute Indian reservations.

All of the communities in this area--Pleasant View, Yellowjacket, Roundup, Cortez, Dolores, Mancos, Hermosa, Durango, and Hesperus--are well-surrounded by private land, mainly agricultural in nature, that could adequately provide for any needed community expansion. The fragmented land pattern makes BLM surface management difficult.

Table 2-19. Manageability Concerns Regarding WSAs.

WSA	Concerns
Cahone Canyon	Twelve existing pre-FLPMA oil and gas leases. Includes 2,800 acres or approximately 31% of total WSA; oil and gas seismic activity previously authorized. Uranium and vanadium exploration in area; within KGS; cultural resources need protection.
Cross Canyon	Thirty-two existing pre-FLPMA oil and gas leases (includes Utah). Includes 8,900 acres or 70% of total WSA. Oil and gas seismic activity and uranium and vanadium exploration previously authorized; needs livestock management in future; within KGS; cultural resources need protection.
Dolores River Canyon	One existing pre-FLPMA oil and gas lease. Includes 40 acres or <1% of total WSA. Oil and gas seismic activity previously authorized; uranium, vanadium, copper and silver exploration in areas; float boating occurs.
McKenna Peak	No pre-FLPMA oil and gas leases. Uranium and vanadium exploration in area; needs livestock management in future; wild horses presently in area; erosion and salinity control projects may be needed. Contains 320 acres of State lands.
Menefee Mountain	No pre-FLPMA oil and gas leases. Within Durango KRCRA; also contains 40 acres private land-private minerals; 120 acres-BLM surface-private minerals.
Squaw/Papoose Canyon	Nine existing pre-FLPMA oil and gas leases (includes Utah). Includes 2,300 acres or 20% of total WSA. Oil and gas seismic activity previously authorized; two wells staked in 1983 in area; uranium and vanadium exploration previously done in area; within KGS; cultural resources need protection.
Tabeguache Creek	No existing pre-FLPMA oil and gas leases. Cultural resources need protection.
Weber Mountain	Four pre-FLPMA oil and gas leases. Includes 2,272 acres or 36% of total WSA and two wells drilled during 1982-83. WSA within Durango KRCRA, adjacent to Mesa Verde National Park Wilderness Area (no visitor use allowed); WSA also adjacent to KGS. Contains 640 acres of State lands.

Note: All WSAs have adjacent farmlands.
Source: BLM Data 1984.

Table 2-20. Counties within Planning Area.

Counties	State (Colorado unless otherwise noted)	County seat	Public land acreage (approximate)
Archuleta		Pagosa Springs	10,500
Dolores		Dove Creek	55,000
La Plata		Durango	29,500
Mesa		Grand Junction	32,500
Montezuma		Cortez	189,000
Montrose		Montrose	326,000
Rio Arriba	New Mexico	Tierra Amarilla	3,500
San Juan		Silverton	49,000
San Miguel		Telluride	299,000

Source: BLM Data 1984.

Southeast Section. BLM-administered public lands continue in widely scattered blocks throughout the eastern portion of La Plata County, where intermingled private lands predominate. The San Juan National Forest borders the public lands to the north and east and the Southern Ute Indian Reservation lies to the south.

The fragmented ownership pattern here makes BLM surface management difficult, especially on tracts without legal and(or) physical access and particularly on the isolated 40-acre and 80-acre tracts near Pagosa Springs. The continuing upsurge in subdividing lands for developing seasonal vacation homes has further complicated the access situation.

Northeast Section. BLM-administered lands near Silverton in San Juan County comprise approximately 51,000 acres of public lands, nearly surrounded by National Forest lands--to the northwest lies the Uncompahgre National Forest; to the west and south and east, the San Juan National Forest.

Lack of records of cadastral surveys and irregular parcel boundaries are the major impediments to developing on-the-ground programs within this section, which is at least 80 percent unsurveyed. Tiny, irregular strips of BLM land are all that remain unpatented along the major drainages and these lands are extremely difficult to locate. Patented mining claims scattered throughout the area are usually the only surveyed lands for miles. The interspersed, patented lands also contribute to legal access problems in some parts of this section. Patented claims are concentrated along major gulches where roads or jeep trails have been built, often for the sole purpose of access to both patented and unpatented mining claims.

AFFECTED ENVIRONMENT--LANDS/FIRE/TRANSPORTATION

The economy of Silverton, county seat and only town in San Juan County, is largely seasonal due to the high elevation (9,300 feet) and is based upon mining and tourism. The Standard Metals Mayflower Mill north of Silverton provides a large portion of Silverton's economy. The town itself provides residential occupancy for its 850 permanent residents and commercial uses for a large summer tourist influx. The Durango-to-Silverton line of the Denver and Rio Grande Narrow Gauge Railroad carries more than 100,000 passengers to Silverton during the 3-month summer season; the train runs to Cascade Creek during nine months of the year (approx. halfway to Silverton).

Fire

The Montrose District has developed a Normal Year Fire Plan that is designed to manage fires as they occur in all resource areas of the District. Cooperative agreements with the USFS, the National Park Service, BIA, the Colorado State Forest Service, and county governments are in place to provide quick initial attack. An average of 47 fires per year were suppressed in the area from 1970 through 1980. The average size of the fires was less than three acres with an occasional 20-acre fire. The largest fire during the period was in June of 1974 when 2,570 acres burned three miles south of Naturita, Colorado. Most fires are caused by lightning and occur in standing pinyon-juniper trees.

The Vigil-Abeyta and Archuleta Mesa areas are considered high resource value areas due to the commercial timber available here. There are many other areas that contain improvements of various types that require immediate fire suppression actions.

The Paradox Limited Suppression Plan, covering approximately 250,000 acres in the northern portion of the planning area, was implemented in 1982. Six fires were monitored in 1982 and 1983 and allowed to burn out naturally with a total of 14 acres burned.

Transportation

Developing and managing a transportation system are accomplished through using a transportation plan, completed for the planning area in 1981 and consists of the following:

Type of Road or Trail	Miles of Road
Primary - Surveyed and designed to the required standard (maintained once a year)	226
Secondary - Maintained at existing standards (every two years)	90
Primitive - Maintained (every three years)	435
Foot and Horse Trails - Maintained (when necessary)	49
Total	800

Road maintenance funds currently provide less than 20 percent of funds needed for their proper maintenance. Numerous areas of public land do not presently have legal access. More than 100 easements would be needed in the planning area to provide legal access to the roads presently on the transportation plan. In addition to the approximately 800 miles of road in the transportation plan, another 1,018 miles of unmaintained road were inventoried in 1980. These roads are presently used in managing the public lands but little or no maintenance is being provided.

Economics

The San Juan-San Miguel economic planning area includes areas of nine counties, eight in Colorado and one in New Mexico. The total 1980 population of these counties was approximately 101,000. Table 2-21 shows the 1970 and 1980 population, per capita income, and number of persons employed by county and state. Significant population growth may be seen in all counties except Dolores and San Juan. All of the counties in the planning area have a notably lower per capita income than the Colorado average.

Table 2-22 shows personal income by major sources by county. Government, services, and construction can be seen to be the top three sources of income in the planning area. Minerals, transportation and public utilities, and retail trade also are substantial sources of personal income.

Table 2-21. Population, Per Capita Income, and Employment Within Planning Area.

County	Population 1970	Population 1980	Per Capita Income 1970	Per Capita Income 1980	Employment 1970	Employment 1980
Colorado						
Archuleta	2,733	3,664	2,744	7,467	934	1,129
Dolores	1,641	1,658	2,022	7,471	567	562
La Plata	19,199	27,195	2,779	7,378	7,183	13,782
Montezuma	12,952	16,510	2,441	7,108	4,474	6,322
Montrose	18,366	24,352	2,758	6,815	7,004	10,680
San Juan	831	833	2,301	6,454	529	489
San Miguel	1,949	3,192	2,148	5,747	726	1,698
New Mexico						
Rio Arriba	21,268	23,617	2,074	5,588	6,201	8,756
Totals						
Colorado	2,207,259	2,889,735	3,887	10,033	869,534	1,399,733
New Mexico	1,170,055	1,299,968	3,072	7,878	323,581	518,000

Sources: U.S. Census 1980; Regional Economic Information System 1984; Colorado Division of Employment and Training 1984.

Table 2-22. Personal Income Within Planning Area. 1/

Major sources of income	County								Total reported 2/	Percent of total
	Colorado							New Mexico		
	Archuleta	Dolores	La Plata	Montezuma	Montrose	San Juan	San Miguel	Rio Arriba		
Farm	13,008	2,852	1,416	4,078	3,999	0	86	3,997	29,436	7
Agriculture	D	58	753	843	913	0	D	648	3,215	1
Minerals	547	D	2,417	4,753	15,502	4,532	4,037	993	32,781	8
Construction	D	146	12,085	14,415	6,789	91	1,567	5,696	40,789	10
Manufacturing	638	L	6,819	3,246	7,825	157	142	3,103	21,930	5
Transportation & public utilities	382	708	10,466	4,919	16,552	L	D	6,999	40,026	9
Wholesale trade	334	388	5,269	5,015	4,942	L	D	969	15,917	4
Retail trade	1,883	611	21,453	11,213	14,038	D	2,251	9,436	40,005	9
Finance, insurance & real estate	D	D	7,716	2,904	4,744	99	1,481	2,523	19,467	5
Services	D	212	35,023	8,122	13,715	D	2,017	18,530	77,619	18
Government	3,278	1,293	30,403	15,663	22,913	633	2,817	28,565	10,261	24
Total labor & properties income	20,070	6,268	133,820	75,171	111,932	5,512	14,398	81,459	331,446	

1/ Regional Economic Information System 1980; figures in $1,000.

2/ Figures in this column are 95% of total due to presence of L and D figures; D = Not reported to avoid confidential disclosure; L = Less than $50,000.

Source: BLM Data 1984.

Recreation

The planning area derives significant economic benefit from expenditures made for recreation activities, many of which are not currently quantifiable--as, for example, hiking, camping, and backpacking. However, numerical data do exist for fishing, hunting, white water boating, and generalized tourist travel in the area.

Fishing

In 1980, 559,000 recreation visitor days (RVDs) were spent fishing in the planning area (see Table 2-23). Fishing occurred at significant levels in all counties and contributed expenditures of approximately $38 million to the economy (McKean and Nobe 1983). Approximately 200,000 RVDs and approximately $13.3 million in expenditures are attributed to public lands.

Hunting

In 1980, 344,000 RVDs were spent hunting in the planning area. Hunting occurred at significant levels in all counties and contributed expenditures of approximately $45 million to the economy (McKean 1983). Approximately 22,000 RVDs and approximately $3 million in expenditures are estimated to be attributable to public lands. Table 2-24 shows 1980 hunting RVDs and expenditures by types of animals.

Table 2-23. Fishing RVDs by County Within Planning Area.

County	RVDs
Archuleta	54,130
Dolores	47,145
La Plata	255,182
Montezuma	35,171
Montrose	64,606
San Juan	26,191
San Miguel	76,579
Total	559,004

* Source: CDOW, personal commun. 1983.
Note: Figures are as of 1980.

Table 2-24. Hunting RVDs within Planning Area. [1]

Animal	RVDs[2]	Expenditures ($)[3]
Deer	118,097	24,724,000
Elk	125,779	18,830,000
Other Big Game	16,007	937,000
Small Game	64,951	886,000 [4]
Waterfowl	6,242	
Upland Birds	12,963	
	344,039	45,377,000

[1] Includes Big Game Management Units (GMUs) 60, 61, 70 through 75, 751, 77 and 78, and Small GMUs 62, 88, and 90.
[2] McKean 1983.
[3] CDOW 1980.
[4] Includes expenditures for small game waterfowl and upland birds.
Note: Figures are as of 1980.

White Water Boating

The Dolores River is extensively used for white water boating. A 1980 estimate of 12,500 RVDs was made for the Dolores. Expenditures for white water boating are estimated at approximately $1 million annually within the planning area.

Tourist Travel

Tourist travel in the planning area generates significant levels of income and employment. Travel-related payroll for 1980 is estimated at $28 million and is responsible for 4,600 jobs here. Table 2-25 shows 1980 travel-related payroll and associated jobs by county. In Montezuma County, travel to archaeologic sites in Montezuma and Dolores counties contributes significantly to the travel level. It is estimated that 18,000 RVDs were spent at BLM-administered cultural sites in 1980. Annual expenditures of approximately $0.5 million may be expected from this level of use.

Minerals

In 1980, minerals with a commercial value of $165 million were produced in the planning area, including sand and gravel, uranium and vanadium, petroleum, gas, coal, and metals. Public lands are estimated to have yielded approximately $37 million worth of these materials. Table 2-26 shows the commercial value of minerals produced by county in 1980. Estimates of values by commodity are also included.

Table 2-25. Travel-Related Payroll by County Within Planning Area.

County	Payroll (in $1,000)	Number of jobs
Archuleta	$ 3,195	529
Dolores	96	13
La Plata	15,711	2,566
Montezuma	3,758	613
Montrose	3,111	505
San Miguel	1,301	213
San Juan	1,039	170
Total	$28,211	4,609

Note: Figures as of 1980.
Source: Business Research Division 1980.

Table 2-26. Dollar Value of Minerals Produced by County Within Planning Area.[1/]

County	Sand and gravel	Uranium/ vanadium	Metals	Petroleum	Gas	Coal
Archuleta	209	--	--	1,521	28	170
Dolores	9	--	--	1,278	1,486	--
La Plata	471	--	--	1,416	3,631	1,894
Montezuma	29	--	--	3,124	1,277	--
Montrose	2,220	17,277	--	--	--	1,863
San Juan	8	--	19,505	--	--	--
San Miguel	171	5,739	--	135	1,780	1
Total	3,117	23,016	19,505	7,474	8,202	3,928
BLM Land[2/]	400	21,000	6,800	3,500	3,200	1,700

[1/]Colorado Division of Mines 1980; figures in $1,000.
[2/]BLM estimate 1984.
Note: Figures are calculated as of 1980.

AFFECTED ENVIRONMENT--ECONOMICS

Forest Products

Complete data are not available for forest product production in the planning area; however, the USFS is estimated to account for 90 to 95 percent of the production that occurs. A 10-year average of USFS's timber sales (1970-1980) is estimated to be approximately 43 million board feet (MMBF) of timber valued at approximately $780,000, which suggests an overall production level (including figures from the USFS, the Colorado Forest Service, the BIA, BLM, and private sales) of 47 MMBF valued at approximately $860,000.

Timber production on public lands is estimated at 200,000 BF of sawtimber per year. Relative to overall production in the planning area, this is an economically insignificant level of production (less than 1%). In addition to timber production, BLM land provides an average authorized yearly total of approximately 900 cords of firewood, 500 Christmas trees, 500 wildlings (see Glossary), and 2,000 posts. Total BLM forest production of all commodities is estimated to have a commercial value of $250,000.

Livestock Grazing

Approximately 116,000 cattle and 62,000 sheep are estimated to graze in the planning area. The forage required by this number of animals is estimated to be 1.5 million AUMs annually with a value of $12.8 million. Fifty-five thousand AUMs have been grazed annually (3-yr avg. use) from BLM land and valued at $0.5 million. Based upon an average of $1.88/AUM, BLM has received approximately $94,000 annually for the past three years for this forage. Table 2-27 shows 1980 to 1982 average livestock numbers by county.

Table 2-27. Estimated Livestock Numbers by County Within Planning Area.

County (Colorado)	Cattle	Sheep
Archuleta	12,833	1,067
Dolores	5,467	--
La Plata	34,500	10,000
Montezuma	27,667	12,066
Montrose	28,000	23,666
San Juan	--	--
San Miguel	7,667	15,000
Total	116,134	61,799

Source: Colorado Department of Agriculture 1982 (1980 through 1982 average).

AFFECTED ENVIRONMENT--ECONOMICS

Social Setting

While BLM sociologic baseline data do not currently exist for the San Juan-San Miguel planning area, the planning area is characteristic of rural counties found in western Colorado. Urban areas near Durango are experiencing growth due to recreation and light industry, while rural areas near Egnar and Naturita are either growing slightly or declining in population due to mineral industry shutdowns.

Much of the lifestyle of the area involves outdoor activities and many of the most popular recreation activities are outdoor oriented. Thus, the resources managed by BLM are of interest to much of the population.

Many residents value the rural character of the area as an important part of their lifestyles. An appreciation for the wide-open spaces, natural values, solitude and personal freedom is generally found. Outside control of land or any kind of outside interference is generally resented.

CHAPTER THREE

ENVIRONMENTAL CONSEQUENCES

CHAPTER THREE - ENVIRONMENTAL CONSEQUENCES

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CHAPTER THREE

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

Chapter Three discusses the physical, biologic, and economic consequences of implementing the alternatives described in Chapter One, and it discusses only the resources that would be affected; we assume that no important impacts to climate, air quality, geology, topography, transportation, noise, and prime and unique farmlands would result from BLM management actions. An interdisciplinary approach was used in developing these impacts (see Table 1-11 for a comparative analysis of impacts by resources at the end of Chapter 3).

GENERAL ASSUMPTIONS AND GUIDELINES

To analyze the impacts of implementing the alternatives, the following assumptions were made:

1. Only significant changes or impacts (which varies by resource) will be analyzed.

2. Changes or impacts described and analyzed are short term unless otherwise stated; long-term impacts would occur over a 20-year period. Short-term impacts would occur within a 10-year period; however, for the no-grazing alternative, the short term is 20 years and the long term is 100 years.

3. The management actions were analyzed under the assumption that all actions would be fully implemented within the planning period.

4. It was assumed that adequate funding and manpower would be available to implement the management actions discussed in the alternatives. However, in practice, funding and manpower are variables that cause unpredictable changes in implementation.

ASSUMPTIONS AND GUIDELINES SPECIFIC TO CERTAIN RESOURCES

Soils and Water

Demand for more water would continue to grow and be more than the water supply throughout the Western United States; demand for better water quality would also grow.

Stipulations protecting watersheds from impacts associated with mineral exploration and development would be included in mineral leases and(or) site-specific environmental assessments for all actions.

BLM is currently in the process of identifying all water sources on public land that qualify as public water reserves pursuant to the Executive Order of April 17, 1926 (Public Water Reserve No. 107). The water quantity reserved is that which is necessary to meet livestock and human uses. Water needed to support BLM programs beyond these needs would be applied for through the Colorado State water appropriation system on a case-by-case basis.

Upstream diversions would not dewater the streams upon which the aquatic wildlife rely.

ENVIRONMENTAL CONSEQUENCES--ASSUMPTIONS AND GUIDELINES

Assessing impacts related to vegetation were based on expectations of near-normal annual climate. Severe climate variations could drastically alter vegetation responses.

Cultural Resources

General and site-specific stipulations will continue to be included in environmental work for all actions. Avoidance will continue to be the primary form of mitigation for any impacts.

Cultural resources will continue to deteriorate via natural forces, visitation, and vandalism if corrective and preventative action is not taken. Stabilization, patrol, and visitor management are proven methods of neutralizing and even reducing these types of deterioration.

The Anasazi Heritage Center will be built and operated as planned.

Public interest in and advocacy of cultural resources via recreation, protection, and educational research will continue to increase, especially in more remote areas.

BLM will continue to provide for an ongoing data gathering and maintenance system for cultural sites (as a result of items mentioned in the first paragraph) in response to the needs of other resource users.

An increase in vandalism to cultural sites directly corresponds to increases in access nearer to these sites.

Estimates on affected sites are taken from existing site densities for similar environmental zones nearby, which have had Class III surveys or from existing Class II survey data (see Glossary).

Wildlife (Aquatic and Terrestrial)

The CDOW can successfully control big game populations on a Game Management Unit (GMU) basis.

Some big game crucial winter range on private land would be lost, which would increase the big game forage demand on public land over the next ten years if total big game populations are to be maintained.

All land identified for disposal, which would occur over a ten-year period, would lose its value as big game habitat (worst case analysis of impacts).

Significant increases in sediment yield would adversely affect fisheries.

The condition of the riparian zone influences the quality of the aquatic environment.

Forestry

Commercial forest land would be harvested on an 80- to 180-year rotation; pinyon-juniper woodland on a 150- to 300-year rotation; and aspen woodland on an 80- to 120-year rotation.

Implementing all vegetation manipulations would happen over a 10-year period.

Energy and Minerals

All mineral rights would be reserved on land identified for disposal where valuable minerals can be identified.

Mines would be provided with necessary leases to continue their present levels of operation.

Lands

BLM would reserve access across parcels disposed of in cases where public access to adjacent State or Federal land is needed. (In most cases, BLM does not have legal access rights to parcels to be disposed of.)

Transportation

Easement acquisition and road development and improvement would be expanded over a 10- to 20-year period. By diversifying the transportation system development, impacts would be insignificant.

Livestock Grazing

The ranch models used in economically evaluating the management proposals are representations of actual ranching operations in the planning area.

Increases in available forage were based on inventory data and estimating increased ecological vegetation condition, which would result from management facilities, intensive grazing systems, and vegetation manipulations.

Providing for basic plant needs for reproduction, growth, and establishment results in similar responses regardless of specific location (Martin 1973).

Expected changes as a result of implementing intensive grazing systems are projected to improve vegetation condition in the long term. This assumption is substantiated by studies concerning deferred rotation grazing by Keng and Merrill (1960). Since deferred and rest-rotation systems are considered in the literature to be equal to or superior to deferred rotation for vegetation response, it is assumed that these grazing systems will respond similarly.

The critical period developed and used to constrain livestock grazing on all improve "I" category allotments corresponds to the period Hormay (1970) discusses (defoliation is most harmful when food reserves are lowest, usually in the spring green-up period when plants are growing most rapidly). Continuous spring use for browse plants can severely deplete their food reserves and thus adversely affect reproductive growth and plant vigor and eventually can cause the plant's death (Garrison 1972).

Wilderness

Current management of wilderness includes existing MFPs. The impacts discussed in Chapter Three are based on current management prior to BLM's Interim Management Policy (Revised July 12, 1983).

It is assumed that the wilderness recommendation for this RMP will be adopted by the President and by Congress.

Public recreational use demand for wilderness areas in the planning area will increase annually at the national average (10%).

Visual Resources

All acreage proposed for vegetation manipulation within the planning area could be accomplished within VRM guidelines.

The objectives for each VRM class describe the degree to which projects would be designated to blend with the existing landscapes. Any visual changes or impacts that fall within the acceptable visual contrast limits of a particular class are not considered significant. A change in VRM classification is considered significant, which would occur because of wilderness designation or primitive recreation management.

The main goal of the VRM program is to maintain the landscape's natural scenic qualities under a variety of uses. Some projects may have short-term visual impacts (3 to 5 years) that might exceed the management objectives for a given geographic area. However, these impacts are not considered significant where long-term rehabilitation plans (from 5 to 20 years) are implemented to maintain visual contrast within the acceptable contrast limits.

ABOVE TIMBERLINE WITHIN THE SILVERTON SPECIAL RECREATION MANAGEMENT AREA.

ENVIRONMENTAL CONSEQUENCES--RESOURCE CONSERVATION ALTERNATIVE

RESOURCE CONSERVATION ALTERNATIVE--INTRODUCTION

This alternative provides management direction to enhance nonconsumptive natural resource values. Multiple resource uses will continue even though some areas will have limited use or will be closed to certain uses. The following discussion by resource describes overall management within the planning area. The Resource Conservation Alternative contains two subalternatives--No Grazing and Ecological Representation.

Energy and Minerals

The no-surface occupancy oil and gas stipulations imposed for the peregrine falcon eyrie on Perins Peak would continue on 1,480 acres.

Critical deer and elk winter range areas will limit periods of oil and gas exploration and development operations on 248,890 acres. Operations may be conducted between May 15 and November 30, a period established in the oil and gas umbrella EAs. This acreage represents a 3 percent increase over the Current Management Alternative. Impacts are not significant because they do not restrict operations.

The no-surface occupancy stipulation imposed for the Dolores River SRMA decreases by 21,600 acres the area in which oil and gas exploration, development, and production can be accomplished (BLM Data 1984). The majority of this acreage cannot be occupied because of steep terrain and costly operations.

Management of the Dolores River SRMA under this alternative would decrease the area for mining claim location and subsequent exploration, development, and production on 21,600 acres due to withdrawal from mineral entry. This represents approximately 2 percent of the planning area acreage and impacts would be for the long term.

Designating all eight WSAs as wilderness will have the following impacts to mineral resources (see Table 3-1 for estimated reserves within the WSAs):

(1) Withdrawal of coal in the Menefee Mountain and Weber Mountain WSAs would result in a loss of approximately 95 million tons of coal reserves (62 million in Menefee, 33 million in Weber). This represents 12.5 percent of the total estimated reserves within the Durango KRCRA from Mesa Verde National Park to Hesperus. Impacts would be for the long term.

(2) Withdrawal of the coal in the Tabeguache Creek WSA could result in a loss of an unknown amount of coal reserves. This WSA is not within a KRCRA but is indicated as having a moderately favorable potential for the resource. There is probably low potential for development of the Dakota Coal in this area.

(3) Congressional withdrawal from leasing for oil and gas in the eight WSAs (102,601 acres) could result in a possible loss of 5.7 million barrels of oil, 8.3 billion cubic feet of gas, and 46 billion cubic feet of CO_2. No reserves have been estimated for the McKenna Peak and Tabeguache Creek WSAs because it was determined that low potential exists for the resource. Withdrawal would not affect pre-FLPMA leases with valid rights. The pre-FLPMA oil and gas leases in Cahone, Cross, Squaw/Papoose canyons and Weber Mountain are mostly held by production from oil and gas units adjacent and outside the WSA boundaries. The majority of the leases probably will not expire during the term of this

plan (10-20 years). Development and production from these WSA reserves have a moderate to high probability during the term of the plan. The development would result in the recovery of a portion (30-70%) of the reserves listed in Table 3-1 being available because of these valid existing pre-FLPMA rights.

Table 3-1. Oil, Gas and CO_2 Estimated Reserves within WSAs.

WSA	Barrels of oil	Gas (mcf)
Cahone Canyon[1/]	369,000	738,000
Cross Canyon[2/]	415,000	831,000
Dolores River Canyon		4,216 mmcf
Menefee Mountain	2.4 million	704,000
Squaw/Papoose Canyon[2/]	495,000	991,000
Weber Mountain	2.02 million	605,000

[1/] Cahone Canyon WSA may also contain 46 billion cubic feet of CO_2.
[2/] Includes Utah figures.
Note: The estimated reserves were calculated by determining reservoir characteristics of nearby fields and then discounting that figure by the wildcat ratio of 11% for the area. The 11% figure was assumed to be the volume of oil and gas most likely to occur within the WSA. Impacts would be for the long term.
Source: BLM Data 1984.

(4) Withdrawal from mineral entry by designating the eight WSAs as wilderness would greatly affect locatable mineral development in the Squaw/Papoose, Cross, and Dolores River canyon WSAs. Withdrawals would not include pre-FLPMA claims with valid discovery. Combined acreage of these three WSAs is 38,670 acres, which represents approximately 3 percent of the planning area acreage. Squaw/Papoose Canyon (440 mining claims) and Cross Canyon (700 mining claims) WSAs have a high favorability for occurrence of uranium and vanadium mineralization. Dolores River Canyon WSA is indicated as having a high favorability for occurrence of base and precious metals, and there is also potential for uranium and vanadium occurrence in the Chinle Formation found there. It is assumed that a moderate probability exists for valid discoveries of locatable minerals in Squaw/Papoose Canyon and Cross Canyon WSAs. Development of these valid pre-FLPMA rights would probably occur during the term of this plan (10-20 years) when economic conditions are favorable for development.

(5) The greatest long-term impact would be from designating the Squaw/Papoose Canyon and Cross Canyon WSAs as wilderness. Extensive exploration drilling by Western Nuclear, Inc., has indicated that a uranium ore body possibly extends into both WSAs. Designating these areas as wilderness could preclude any development of the ore body, with the exception of those pre-FLPMA mining claims with valid discovery.

No mineral entry on cultural withdrawal areas would decrease available acreage for mining claim location, exploration, and development on 4,785 acres, a 425-acre increase beyond the Current Management Alternative. The total acreage represents approximately 0.4 percent of the planning area and impacts would be for the long term.

Travel restrictions associated with various programs will require mining claimants to file Plan of Operations under 43 CFR 3809 instead of a Notice of Intent.

Federal coal for exploration and development would be available on 34,000 acres in the Durango KRCRA.

Possible future coal leasing would not be available on the Nucla and East Cortez KRCRAs. Managing sand and gravel permits on approximately 880 acres will not provide for meeting future demands for the resource.

Disposal of public lands with reservation of minerals to the Federal government will result in 18,000 additional acres of split estate management, which will add approximately 6.1 percent more split estate lands than currently exist which increases manageability problems. Impacts would be for the long term.

Summary

All impacts to minerals in this alternative are long term.

Significant impacts of this alternative are the withdrawals from mineral entry (approx. 129,000 ac) and no-surface occupancy stipulations on the recreation portion of the Dolores River (21,600 acres). Greatest impacts will be from designation and withdrawal of all WSAs, which will preclude development of the coal, oil and gas, and uranium resources that have a high probability of being present in some of the areas, with the exception of those lands containing pre-FLPMA leases or claims with valid rights or discoveries. A portion of the leasable and locatable minerals present will probably still be produced (pre-FLPMA leases and claims), subject to valid rights, the result being that not all the reserves in Cross, Squaw/Papoose, and Cahone canyon WSAs will be lost due to designation as wilderness.

The production and use of coal, oil and gas, and other minerals are irreversible commitments of natural resources. To the extent they are developed in this alternative, there will be irreversible and irretrievable commitments of resources.

Vegetation

The only significant short-term impacts to vegetation that would occur are probable increases of forage plant vigor where livestock reductions result in lowered utilization levels. Current utilization trends will continue in the short term until use patterns are disrupted with implemented grazing systems and facilities.

Figure 3-1 illustrates the expected long-term changes in vegetation condition. Projections are based on the potential of existing vegetation to respond to changes in grazing management and improvements. The major long-term impacts to vegetation would be slight improvements in the type and productivity of forage species on sites that are currently in poor or fair condition. Under intensive management, some sites would be converted from poor to fair condition and from fair to good condition.

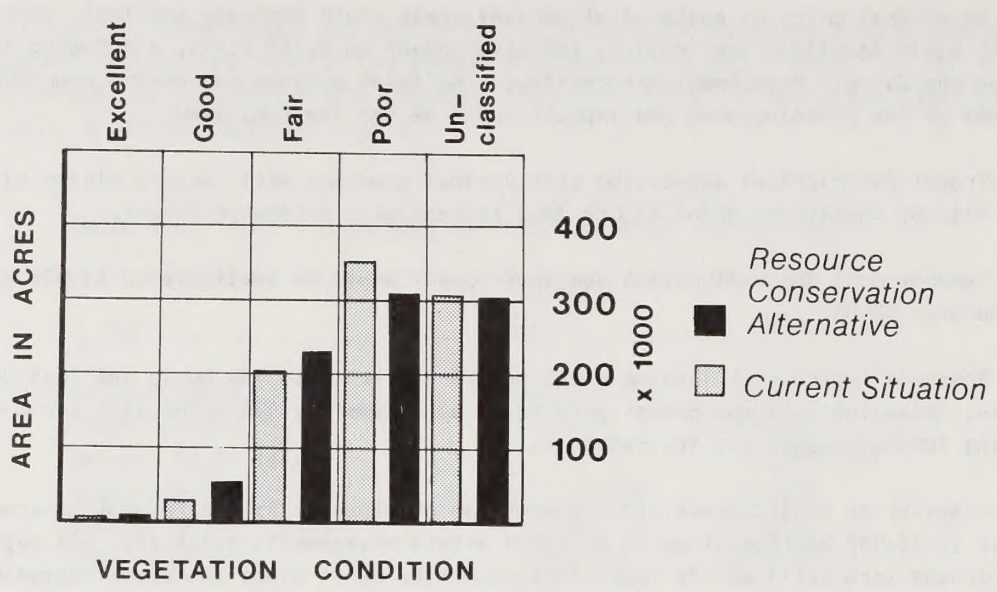

Figure 3-1. Long—term changes in vegetation condition under the Resource Conservation Alternative.

Additional forage may be produced as a result of timber and woodland harvesting.

Proposed watershed improvement treatments and wildlife treatments would have long-term positive impacts to vegetation and incidentally to livestock grazing. Increased vegetation densities and productive and available forage will result from the proposed treatments.

Impacts to T&E plants would be positive in the short and long term because of inventories and special stipulations on all proposed actions.

Existing and possibly expanded limited fire suppression plans would affect vegetation resources in the long term by allowing more pinyon-juniper woodlands and sagebrush acreage to burn naturally and to be replaced with herbaceous vegetation.

Wilderness designation would have long-term positive impacts to vegetation under this alternative by precluding many development activities.

ORV restrictions would have both short- and long-term positive impacts to vegetation by limiting surface disturbances.

Summary

In the long term, the overall type and productivity of forage species on public lands would improve slightly under this alternative. Properly placing and designing improvement projects could lessen some of the possibly adverse impacts to vegetation.

ENVIRONMENTAL CONSEQUENCES--RESOURCE CONSERVATION ALTERNATIVE

Soils and Water

Erosion, sediment, and salt yields would be reduced by implementing vegetation treatments, water control structures, and aquatic and riparian improvements in the planning area. The location of the treatments and the treated acreage or miles would primarily determine the magnitude of these impacts.

Properly implemented grazing systems that adhere to adequate rest cycles during periods of critical soil moisture and critical plant phenology and proper use restrictions would help reduce erosion, sediment, and salinity yields on those sites.

The increases in visitor use brought about by designating areas as wilderness may result in a slight increase in erosion rates on trails and campsites as well as decreased water quality (sediment yield and bacterial contamination). Due to some protection from mineral development, wilderness designation would have long-term, positive impacts to soils and water.

Roads associated with timber harvest, even those properly laid out and constructed, would result in short-term increases in erosion rates and sediment yield. The degree of this impact will vary with the size of the timber harvests.

Continued protection of the Boulder Gulch watershed near Silverton, Colorado, and the ground-water aquifers associated with the Dry Creek Basin and Uravan domestic and municipal wells are necessary to protect the water quality.

After conducting an inventory in the Upper Animas River drainage, 20 acid drainage and pollution sources from heavy metals will be treated.

Summary

Implementing the Resource Conservation Alternative would result in significant decreases in erosion, sediment, and salinity yields and would improve aquatic habitat and provide protection to municipal and domestic water sources.

Terrestrial Wildlife

Implementing AMPs, wild horse herd management plans, and the wildlife program would improve range and habitat conditions on at least 701,000 acres. Intensive livestock management and vegetation treatments would resolve existing problems of forage shortages and provide for 125 more pronghorn antelope and 300 bighorn sheep and would also prevent the short-term loss of 890 elk and 1,000 deer. Riparian habitat would also be improved by intensive livestock management, fencing, and instream structural improvements.

As many as 5,700 acres would be treated under wildlife program funding with minimally negative impacts to nongame species. As many as 8 stream miles of riparian habitat would be improved with structures and protective fencing (5 miles under the wild horse program). Water development would improve 3,200 acres of wildlife habitat.

Bald eagles would benefit from habitat protection. Additional winter concentration areas would receive protective management. Recovery and reestablishment of peregrine falcons would be assisted by continued releases. State T&E species recovery program would

be assisted by the provision and improvement of potential habitat for river otters. Other T&E species would be protected and managed consistent with existing laws and regulations. Sensitive and nongame species habitat would be improved along with improving the general range condition and emphasizing riparian habitat management.

Lands disposal and conversion to private ownership and possible development would eliminate 2 percent of existing wildlife habitat and 3 1/4 miles of riparian habitat. Riparian losses would likely be significant because of limited availability of this habitat type and high potential for improvements on some tracts. Crucial winter range impacts are minimal (40 acres). Significant, negative impacts to bighorn sheep habitat near Placerville could result in the loss of winter range for the remaining bighorn populations in the area. Potential conflicts with T&E species habitat would have to be resolved. Land disposals could add to significant, cumulative impacts to big game migration routes between Durango and Bayfield (affecting 120 acres).

Forestry program actions could cause significant losses of nongame species habitat as could range program vegetation treatments if sales or treatments occur in the limited amount of old growth pinyon-juniper habitat. Commercially harvesting timber in ponderosa pine, spruce-fir, and aspen types would not have significant impacts to wildlife habitat, as BLM lands in the region contain a small fraction of these habitat types.

Upland and riparian habitat deterioration could be expected to occur on allotments not covered by AMPs where licensing livestock exceeds estimated carrying capacity. Most significant impacts are to riparian habitat.

Improving the vegetation through both wildlife and range programs could enhance recreation opportunities associated with hunting and wildlife viewing.

Oil and gas leasing restrictive stipulations (on crucial winter ranges) would apply to slightly different areas and approximately 8,000 more acres than are currently protected. Limiting seasonal access or surface occupancy will protect the lessees from potential Federal wildlife violations, reduce destruction of habitat and prevent disturbances on seasonally crucial wildlife habitat areas.

Wilderness designations would have minor impacts to the wildlife program because the wilderness nonimpairment criteria would limit opportunities for vegetation manipulations within those areas. An additional, but presently unquantifiable impact resulting from increased visitor use might also be expected (on a case-by-case basis). Wilderness designation would also protect wildlife habitat from disturbances associated with development.

Summary

Terrestrial wildlife habitat conditions should improve over the majority of the planning area due to more intensive management of wildlife habitat, livestock, watershed areas, vegetation treatments and habitat protection in WSAs. River otters, bald eagles and peregrine falcons should benefit from provided protection. Land disposal could cause minimal losses of big game winter ranges and riparian habitat. Big game populations would remain stable over the long term (similar to impacts listed under the Current Management Alternative).

Aquatic and Riparian Wildlife

Beneficial impacts would occur from range management activities due to the incorporation of aquatic and riparian objectives into AMPs; however, until they are completed, it is expected that a downward trend in habitat quality will continue. There should be positive impacts on those streams which have been intensively monitored (124 miles) through coordinated activity planning and monitoring. The remaining 280 plus miles of uninventoried streams could potentially be improved through similarly coordinated activity planning. This potential may only be determined after further inventories and(or) monitoring to determine the current habitat condition.

Wildlife management direction will positively affect aquatic and riparian habitat through substantial expenditures for aquatic and riparian habitat improvements. Additional monitoring will be required to determine habitat quality for those streams not inventoried.

Some beneficial impacts to recreation would result from the increased public awareness and support from the CDOW in implementing the aquatic and riparian habitat improvements associated with the Dolores and San Miguel rivers. Some short-term impacts will occur on aquatic and riparian habitat due to constructing recreation facilities in the Dolores River area. In addition, there may be some adverse impacts due to increased fisherman use.

Some adverse impacts are expected as a result of increased public use in the wilderness areas but are currently unquantifiable. Wilderness designation would also affect constructing aquatic and riparian habitat improvements, as no mechanical equipment would be allowed in these areas. Nonimpairing types of habitat improvements may still occur; therefore, these adverse impacts are expected to be minimal.

In specific areas such as Dry Creek, there may be continued degradation of riparian habitat quality due to grazing resulting in significant impacts to water quality, erosion, and sedimentation.

Due to road construction and timber sale layout in the forestry resource, short-term impacts will occur to water and habitat quality. However, these impacts should be insignificant in the long term since they will be mitigated on a case-by-case basis through coordinated activity planning.

It is expected that erosion and salinity management practices will result in overall long-term positive impacts to the aquatic and riparian habitat resource.

Summary

Positive impacts to 250 miles of aquatic and riparian habitat will be realized from livestock grazing, wildlife, recreation, and soils, and water activities.

Livestock Grazing

Under this alternative, an initial reduction of 29,062 AUMs is proposed in livestock grazing, which would result in a decrease of 45 percent of the current active preference (see Glossary). These initial adjustments are necessary to help achieve the management

actions developed for each allotment in the "I" Category (see Appendix Nine-D in the Draft RMP). Appendix Nine-E displays the recommended change in AUMs for all allotments (see Draft RMP).

In the long term, a reduction of 21,072 AUMs from current active preference is proposed, depending largely on implementing grazing systems, installing range improvements, and completing land treatments proposed under this alternative. Table 3-2 summarizes the short- and long-term changes proposed in current active preference.

Table 3-2. Changes in Grazing Use Under the Resource Conservation Alternative.

Grazing use	Total AUMs	Change in use	
		AUMs	%
Current active preference	64,232	-	-
Initial adjustment	35,170	-29,062	-45
Long-term adjustment	43,160	-21,072	-33

Source: BLM Data 1984

This alternative would have impacts to livestock grazing in both the short and long term. When nonuse is taken into account for 1980 through 1982, the reductions from average actual use amount to 15,181 AUMs in the short term and 7,191 AUMs in the long term. This nonuse would be a portion of the initial downward adjustment proposed in this alternative. The short- and long-term impacts to each livestock operation would vary according to how grazing use in the allotment fits into the yearlong ranch operation. Increases or decreases of more than 15 percent of current authorized use would be phased in over a five-year period. Even with the phase-in period considered, this alternative would force operators to either secure alternative pasture or forage and(or) to reduce herd size.

Wilderness designation would not have any significant impacts to livestock grazing. Wild horse use could have adverse impacts as far as meeting AMP objectives (BLM needs to incorporate adequate rest schedules and facilities).

Summary

The short- and long-term impacts to livestock management are partly mitigated by the nonuse that has typically occurred; however, there would be a significant monetary loss to livestock operators due to lowered livestock production in both the short and long term.

Except for phasing in AUM reductions over a five-year period, little can be done to mitigate the adverse impacts this would have on livestock operators.

Wild Horses

Under this alternative, 75 head in Spring Creek and 50 head in Naturita Ridge would be managed. Due to forage competition, livestock grazing would be reduced or discontinued. Big game use of the areas would continue but would not be significant in the short or long term.

The sex ratio and age class structure would be monitored to maintain a healthy viable breeding population. If populations were allowed to increase, based on monitoring of forage condition and trend, the utilization level would be limited to moderate (50% of current annual growth) and a healthy herd would be maintained.

Population reductions by live trapping and distribution through the adoption program would cause minor, short-term disruptions of normal wild horse habits and behavior. In the short term, the horses culled for adoption would be the least desirable in conformation, color, and other genetic traits, but in the long term, the result would be genetically higher quality breeding populations and adoptable horses.

Wilderness designation could have potential long-term impacts to the Spring Creek herd area by limiting the management techniques and facilities in the eastern portion of the area. Increased visitor use could have adverse impacts to wild horses, but in the long term could be mitigated through wilderness management plans.

Watershed treatments projected in the Spring Creek area would have positive short- and long-term impacts on the wild horses by increasing vegetation densities, productivity, and available forage.

Summary

In the short and long term, wild horse populations would be maintained at healthy, viable levels in both areas. Vegetation would be maintained or improved in the long term and would enhance wild horses.

Forestry

Vegetation treatments of forested land by range and wildlife would result in little or no impacts to forestry.

Areas with special recreation values will be withdrawn from timber and woodland production and include Silverton, the Dolores River, Lemon Dam and Vallecito Lake and Menefee and Weber mountains. Wood fiber production loss as a result of these withdrawals is approximately 300 thousand board feet (MBF) each year. When looking at the total timber and woodland production for the region, a yearly loss of 300 MBF is insignificant.

Although no harvesting is allowed in the WSA, the available forest land will remain in the sustained yield base until the area has been designated as a wilderness. If all areas were designated wilderness, this would result in a wood fiber production loss of 176 cords per year (88 MBF). This impact would affect all WSAs except the Dolores River Canyon and McKenna Peak WSAs. These losses are not significant.

Road and pad construction as a result of mineral activities can have beneficial and adverse impacts. The loss of production and improved access are so minimal that the impacts are not significant.

Production loss as a result of protecting cultural resource sites is insignificant.

Land disposal actions could reduce the BLM commercial timber base by 1 percent and result in an insignificant production loss of 5 MBF per year. The woodland base could be reduced by 10 percent with a production loss of 106 cords per year, not significant impacts.

Placing commercial forest under intensive management should result in future yields that are double the existing unmanaged stand yields. Timber yield increases associated with the small BLM timber base is insignificant when compared with total timber production for this region. Placing the woodland species under management is significant because, for the first time, the woodland base is recognized as a legitimate resource and will be managed for a sustained yield of wood fiber.

Summary

Total forest production loss associated with existing and proposed management action could be 446 MBF per year (892 cords per year). When compared with the yearly demand of 35 million board feet (MMBF) expected and anticipated timber production by private, State, and other Federal agencies, this loss is insignificant. Placing the woodland base under management is significant in the long term because lack of management could eventually result in the elimination of the woodland resource.

Recreation

Certain livestock management practices could have some negative impacts to public experiences in the Dolores River SRMA. Most impacts could be mitigated through season-of-use adjustments and practices in those areas managed for their primitive and semiprimitive, nonmotorized opportunities.

Wildlife management would have positive impacts to recreation activity and opportunities by increased viewing, hunting, and fishing. In the long term, there would be an increase in these opportunities within wildlife management areas. The introduction of bighorn sheep and river otters and aquatic habitat improvements in the Dolores SRMA will increase recreation setting and activity opportunities.

Wilderness recommendations would have both long-term positive and negative impacts to recreation and would eliminate historical motorized use within all wilderness areas. These losses would not be significant. Designation would provide increased opportunities for primitive recreation in a variety of settings and ecotypes which are atypical of existing wilderness. Implementing permit systems could adversely affect numbers of visitors or visitor preferences.

Continuing existing mineral development restrictions within the Dolores SRMA would have long-term, positive impacts to the recreation resources by maintaining the settings most desired by the public.

Cultural resources management could have long-term, negative impacts to recreation resources in some areas by limiting historic motorized use in locations desired by the public. These restrictions will eliminate specific activity and opportunity settings and will be difficult to manage and enforce.

The disposal of the Indian Springs site would have short- and long-term positive impacts to recreation. Unless the site is disposed of or extensive management efforts are initiated, overuse during hunting seasons will destroy the site. There are possibilities of CDOW management coordinated with their Young property administration.

Wild horse management would have a long-term positive impacts to recreation by increasing opportunities for horse viewing and interpretation.

The continuation of forest management restrictions within the SRMAs would have long-term positive impacts to recreation resources.

Soils and water improvements could have positive impacts to recreation in the long term by positively affecting user experiences through water quality improvements.

Summary

Protecting and enhancing recreation resources by management and development restrictions would have long-term, positive impacts to recreation and overall would continue to provide the settings and opportunities most desired by the public. Wilderness designation would have both positive and negative, long-term impacts to recreation opportunities and settings.

Cultural Resources

(Note: Impacts to sites affected by each alternative are not cumulative. In many cases, the same site may be affected by several actions. The estimated numbers are based upon site densities projected from Class II and Class III survey data [see Glossary]. The Class II survey data indicated a strong reliance on environmental variables, such as distance from water, soil type and depth, elevation, and slope.)

General restrictive management for all eight WSAs will have long-term positive impacts to a large number of cultural sites (approx. 2,400 sites). These beneficial impacts will be due primarily to reductions in vandalism because of decreased access, which could be somewhat offset by increases in foot and horse travel due to increased visitor use. Beneficial impacts will be especially significant in the Cahone, Cross, Squaw/Papoose and the Dolores River canyons and the Tabeguache Creek areas. Research and interpretation will be more difficult due to access restrictions associated with the WSAs.

Avoidance measures will be used on the 6,500 acres of vegetation treatments which will be maintained. A possibility exists for inadvertent permanent damage to 400 archaeologic and historic sites. The extent of impacts will depend upon the adequacy of cultural resource inventory and the nature of avoidance measures. The method of treatment will vary how significant the impacts are (anywhere from low to moderate). Close supervision will keep impact levels low.

Inadvertent impacts may occur to approximately 13 sites from the new vegetation treatment proposed (200 acres); however, close supervision and adequate inventory data will keep impact levels low.

Decreases in livestock grazing will have slight positive effects to an unknown number of sites from reductions in trampling. AMPs will have positive effects to cultural and historic sites from planned livestock avoidance of high site density areas. Some negative

impacts may occur due to livestock concentrated in pastures. A strong inventory base and closely monitoring identified, sensitive sites will reduce these effects.

Net beneficial impacts will result from the educational aspects and visibility of the Anasazi Heritage Center. Losses could occur if budgeting were low and funds were taken away from on-the-ground resource protection and use.

Major long-term, positive impacts will result from CRMP development and increases in operating budgets for approximately 1,200 sites within Mockingbird, Cannonball, Hamilton, and Cow mesas, Dolores Cave, Lowry, Painted Hand, and Dominguez-Escalante ruins, Sand, Bull, East Rock, and Squaw/Papoose canyons, Indian Henry's Cabin, McLean Basin, Painted Hand Petroglyphs, Hanging Flume, Lightning Tree Tower Group, and Tabeguache Pueblo areas. As a result of CRMPs and increases in funding for implementation, stabilization will prevent structural deterioration, patrol will prevent damage from vandalism, and inventory and mapping will provide for more efficient and effective protection and use of these significant sites and areas.

Managing 45,000 acres in the Silverton SRMA will likely have long-term advantages for more than 50 historic and archaeologic sites. Cooperative CRMPs should be developed to channel visitors and provide for site protection and visitor safety. No significant impacts are expected from SRMA management for the Silverton area. Road closures will have more significant, positive effects on site protection. ORV planning in this area will likely have long-term benefits pertaining to vandalism reduction on approximately 40 historic and archaeologic sites.

Managing for visitor use on the Dolores River SRMA will channel visitors away from fragile sites to some degree, which will likely have long-term positive impacts to approximately 40 archaeologic and historic sites. Visitors will be provided with an educational experience here, related to the unique cultural values found along the Dolores River corridor. Vandalism may be reduced by developing CRMPs for sites attracting recreation users.

Disposing of 18,000 acres of public lands will have no significant impacts to archaeologic, sacred, or historic sites. Class III (intensive) inventories will be done on all parcels identified, and, if significant cultural values are found, these lands will no longer be considered suitable for land exchanges or sales.

Managing 78,000 acres to reduce erosion and sediment yield will have net positive impacts to 25 archaeologic and historic sites over the long term. Erosion control measures, which could be significant if they are targeted to cultural resources protection, may prevent loss of all or portions of these sites. Additional inventory will be needed to identify program strategies and needs. There is a low likelihood that inadvertent damage to approximately 360 archaeologic and historic sites may occur if adequate inventories are not done and monitoring levels are low.

Managing 30,000 acres for salinity control may have permanent impacts to 117 archaeologic and historic sites. These would result from inadvertent activity related to project installation and will be greatly reduced by adequate inventories and closely supervising construction. However, most of the projects will be in low site density areas.

With 3,690 acres per decade of commercial and noncommercial forest product sales, there is a moderate likelihood that 40 sites will suffer some form of permanent damage.

This will not be significant if adequate inventory data are accumulated to provide for their avoidance (and possibly mitigation) and if close supervision of the timber sales is undertaken. Inadvertent impacts will likely occur in some cases where increases in access will bring vandals to the sites. These impacts are not expected to be high for the proposed acreages as they lie in low site density areas.

A high probability of permanent damage to approximately 2,700 sites will continue from public fuelwood sales (estimated at 1,000 cords/yr). Damage to cultural values from unsupervised, on-demand woodcutting is not quantifiable due to a lack of sufficient site-specific inventory data. Significant impacts are likely occurring due to the concentration of the noncommercial activities in high site density areas (west of Cortez and Disappointment ridges). Many of the areas are not inventoried due to low personnel levels. Stipulations are not monitored for compliance, which greatly increases the level of impacts.

Improving aquatic areas will reduce erosion, which may have beneficial effects on a low number of cultural values. Impacts from project installation will be avoided. Some inadvertent damage to a low number of sites may occur but will not be significant if adequate inventories are done and construction is carefully monitored.

Habitat improvements via plowing, burning, and seeding (with some oak crushing) on 5,700 acres may have permanent effects on approximately 98 archaeologic and historic sites. These habitat improvements are proposed in low site density areas, however, and all surface-disturbing treatments will be inventoried and impacts avoided or mitigated. With large land treatments, however, some inadvertent damage may occur. These impacts could be significant unless close project monitoring and an adequate inventory is done.

Continuing oil and gas and CO_2 operations could have permanent effects on 14,000 archaeologic and historic sites. Site-specific impacts will be avoided or mitigated on a case-by-case basis.

However, significant impacts to sites will continue to occur from increases in access which brings about increases in vandalism, especially evident in high site density areas such as the Sacred Mountain area and parts of the Disappointment Valley and the Paradox areas. New operations will increase the current levels of impacts. Mitigating measures to limit impacts to cultural sites due to increased access have previously been employed, including road closures, locked gates, signing, stipulation of operator's responsibility for patrol, and fencing, measures that have generally been ineffective. The locked gate on Mockingbird Mesa where CO_2 development is occurring has kept many vandals out. However, it had to be reinstalled three times with several new locks. Then a 24-hour gatekeeper was hired by the operator to control vehicle access and to prevent vandalism. Lack of vegetative and topographic barriers to vehicle use has made road closures difficult, especially on mesa tops and in canyon bottoms. Using brush, fencing, and rock closures has been ineffective in all but a very few cases where vertical slopes were involved. Patrols by industry personnel were also generally ineffective because of limited project construction time, time of day, and seasonality; in addition, these persons do not have a background and training in law enforcement.

Mitigating measures to negate impacts to cultural resources via reclamation are effective in many cases only to reduce erosion. Methods used to mitigate impacts from intrusion to site setting would involve brush and tree planting to natural habitat density and have not been used because of cost and availability.

ENVIRONMENTAL CONSEQUENCES--RESOURCE CONSERVATION ALTERNATIVE

Many of the above mitigating measures can and should continue where they can be effectively employed to limit impacts to cultural resources. However, for the most significant sites and districts discussed (see Appendix Four), a no-surface occupancy lease stipulation has been the proven method that will ensure protection of both individual sites, areas, and habitats.

Site-specific inventories as a result of the high levels of energy development have had a positive effect on the data base for available cultural information in the San Juan Resource Area and have aided significantly in managing and protecting 700 cultural sites. Much of the recent Anasazi culture research has come about via inventories and excavations sponsored by the oil and gas industry. Their cooperation and concern in exceeding the legal requirements for cultural resource protection have recently provided an invaluable amount of data. However, net impacts are still negative due to the effects of vandalism from increased access, which has been difficult and costly to mitigate. Vandalism at these sites has not been associated with industry personnel, but the public using newly opened access into areas that were previously remote and inaccessible.

In areas where site densities are high, such as Mockingbird Mesa, significant sites have been completely avoided, due to industry's concern and intense monitoring by field personnel. This is an excellent example of how cultural values can coexist with energy development in many areas. Access and vandalism can be controlled and would limit the conflict between energy development and the protection of cultural sites.

Managing 19,800 acres of DOE lease tracts may have permanent low levels of impacts to approximately 450 archaeologic and historic sites. Site-specific avoidance measures will protect sites from direct impacts on a case-by-case basis. Inadvertent damage may occur due to low levels of monitoring and inventory personnel.

Impacts to the setting of unique cultural values will occur where geographically confined areas previously unspoiled by intrusions are opened to mineral development. These impacts are significant, because only a handful of such areas remain unscathed.

Hard rock mining operations under 3809 regulations (currently 4,500 acres) may have permanent effects on approximately 175 archaeologic and historic sites. Due to low levels of monitoring, inadvertent damage to sites in the Disappointment Valley and Paradox areas is occurring. Direct impacts are being avoided in most cases, but some sites are damaged due to lack of inventory because of low personnel levels. Damage to Silverton area sites is unknown but is likely to be low.

The 880 acres of sand and gravel operations which will be managed under this alternative may have permanent impacts to approximately 20 archaeologic and historic sites. These sites may be inadvertently damaged due to gravel operations, which will increase site visibility. Vandalism may occur in high site density areas; however, impacts will be lessened by increased supervision and monitoring all operations.

Managing 32,000 additional acres of coal leases in the Hay Gulch/Cherry Creek area will have low levels of permanent impacts to approximately 100 historic and archaeologic sites. This development is predominantly in a low site density area. Because of the underground mining techniques employed, the low site density, and avoidance and data recovery methods, significant impacts are not expected. Some damage may occur from subsidence but this can be considered during inventory and evaluation stages; measures can be taken to reduce the chances of impacts.

ENVIRONMENTAL CONSEQUENCES--RESOURCE CONSERVATION ALTERNATIVE

Summary

The Resource Conservation Alternative contains the most beneficial impacts to cultural resources, which is due to decreases in access due to wilderness and intensive recreation management. Over time, developing CRMPs will enhance a large number of significant sites. Project developments will include cultural resources protection in their planning and development stages, which will provide more protection for important sites. Mineral operations will have detrimental effects to cultural values from inadvertent damage where this development occurs in high site density areas. Information gathered from project inventories will enable better management of all cultural resources.

Increases in adverse impacts to cultural resources from illegal collection and excavation are linked to increases in vehicle access into an area. This can occur when an action requires a temporary or permanent access road and is directly proportional to site density and size. The association between access and vandalism is documented by BLM's Colorado Cultural Resource Series publication No. 11 (BLM 1981).

Visual Resources

Approximately 50 percent of the important landscapes are not identified in the Resource Conservation Alternative for special visual management, VRM Class I or II. This could result in construction project design with visual contrast levels in excess of what would be required to maintain the scenic quality (see Appendix Two in the Draft RMP for details).

All other areas of scenery with important landscapes would receive VRM Class I or II management, which would tend to maintain visual resources over approximately 50 percent of the planning area.

Wilderness

Nonmotorized recreation users would have increased opportunities for solitude and primitive recreation.

The reintroduction of bighorn sheep and river otters in the Dolores River Canyon WSA would enhance wilderness values. Wild horses would be protected in a natural environment in the McKenna Peak WSA. Wild horse viewing would be a supplemental value to users.

Withdrawing the WSAs from future mining and mineral leasing would protect and preserve their wilderness values for future generations. All of the WSAs have mineral values which have valid existing rights associated with their pre-FLPMA mining claims or leases. The wilderness values could be significantly affected by their development and subsequent surface disturbance as a result of these rights. All WSAs have these rights; however, the highest potential for development appears to be in Cahone, Cross, and Squaw/Papoose canyons. These valid existing mineral rights would make future management difficult. The development of the valid existing rights would cause irreversible and irretrievable losses of the wilderness resources.

Disposing of public land and ROWs would not be allowed and would enhance the natural values found in the WSAs.

ENVIRONMENTAL CONSEQUENCES--RESOURCE CONSERVATION ALTERNATIVE

Wilderness values in Tabeguache Creek and Cahone, Cross, and Squaw/Papoose canyons (WSAs) would be enhanced by closing cherrystemmed roads and ways to motorized use.

Diversity within the NWPS would be enhanced (see the Ecological Representation Subalternative for details). The ecological systems of Dolores River Canyon, McKenna Peak, Cross Canyon, and Weber Mountain WSAs are not presently well represented in the NWPS.

All eight of the WSAs are manageable as far as the effects of topography, vegetation, and other land use will limit future conflicts. The foremost manageability question is the conflict of the mineral values present in the WSAs.

Due to possible development of minerals and pre-FLPMA oil and gas leases (within KGS), managing Cross, Cahone, and Squaw/Papoose canyons (WSAs) as wilderness would be considered doubtful. Possible development of minerals and pre-FLPMA oil and gas leases (not in the KGS) in Weber Mountain WSA would cause future management problems but to a lesser degree than in Cross, Cahone and Squaw/Papoose canyons (WSAs). Weber Mountain only has four pre-FLPMA leases and topography limits the development of these leases. Dolores River Canyon WSA is deemed manageable as wilderness due primarily to its extreme topographic limitations. Tabeguache Creek, Menefee Mountain, and McKenna Peak WSAs would be manageable as wilderness since mining claims are minimal and no pre-FLPMA oil and gas leases exist.

The Bureau of Reclamation will address the impacts to the wilderness values within the Dolores River Canyon area and to water quality and quantity in their forthcoming Supplemental EIS on the Paradox Valley Unit, Colorado River Basin Salinity Control Unit (see Chapter Two for description).

Summary

The protection of wilderness values would generally enhance natural values associated with the WSAs. Diversity in the NWPS would be expanded and supplemental values would be protected or enhanced. Pre-FLPMA mineral rights could be developed and cause irreversible and irretrievable losses of the wilderness resources.

Lands

Designating the eight WSAs as wilderness would result in decreased opportunities for ROWs and authorizations on public land. Particularly in Squaw/Papoose, Cross, and Cahone canyons, a combination of significant energy development (CO_2 and oil and gas from the McElmo Dome) and topographic limitations (steep canyons) dictate a high demand for energy-related ROWs. However, formally designating wilderness areas would preclude any roads, pipelines, or powerlines from being constructed with the exception of ROWs associated with pre-FLPMA mineral rights. Instead, such facilities would need to be located outside of wilderness areas--this means rerouting around the wilderness areas, often entirely avoiding the public lands. Such rerouting is a feasible alternative in most cases, but it does cost more for the applicant (typically, the energy development company), and such costs are passed on to the consumer. Economic impacts cannot be quantified except on a case-by-case basis but are expected to be significant.

Consolidating public lands through disposing of small, isolated parcels of public land that are difficult and uneconomical to manage will improve the efficiency of land use authorizations by BLM. Under this alternative, 1.8 percent of the public land would be disposed of and(or) consolidated.

ENVIRONMENTAL CONSEQUENCES--RESOURCE CONSERVATION ALTERNATIVE

Fire

Additional wildfire limited suppression areas will be identified and managed in a similar manner as the present Paradox Limited Suppression Plan is being managed. Limited suppression usually results in additional acres being burned and more usable livestock forage and wildlife habitat. Fire protection and suppression costs should decrease within limited suppression areas.

Increased fire suppression costs could occur where vegetation treatments change vegetation types from brush to grass resulting in more flash fuels and a greater spread rate for fires.

No significant impacts from wilderness designation would occur to the fire program due to low fire occurrence and sparse fuels.

Disposing of isolated parcels of public land would reduce fire protection and suppression program costs. Isolated parcels require more efforts in fire initial attacks because doubts usually exist about ownership. But fires need to be suppressed to protect surrounding private lands.

Increased fire protection and suppression cost can be associated with most forestry practices due to changes in fire spread rates and creation of slash.

Economics

The Resource Conservation Alternative projects BLM investments of $1.9 million over a ten-year period with emphasis on stabilizing range condition, fishery improvement, and recreation access by an increased number of tourists. This level of investment and emphasis would result in annual gains of approximately $9 million in 1994 and $10 million in 2000 in increased total personal income within the planning area.

Under this alternative, the livestock grazing program is expected to spend approximately $780,000 for range and wildlife habitat improvements and $650,000 for soils and water improvements. Resulting improvements in wildlife habitat should sustain current levels of hunting revenue. Aquatic habitat improvement expenditures of approximately $473,000 may be expected to raise fishing revenue in the planning area.

Management emphasis on recreation opportunities, wilderness values, and access to archaeologic resources should increase annual tourist expenditures by $7.5 million by 1994. The value of oil and gas production is expected to remain stable at approximately $6.7 million annually due to decreased management emphasis.

Table 3-3 compares the economic effects of the Resource Conservation Alternative to the baseline projections for 1994 and 2000. It illustrates expected changes in population, employment, per capita income, and total personal income brought about by projected levels of hunting, grazing, fishing, tourism, and oil and gas activities.

BLM management of public land is shown in Table 3-3 to cause less than a one percent change in any economic indicator when viewing the total planning area. No significant impacts are projected within any economic sector of the individual counties within the planning area. However, a 400- to 500-person increase in population is projected to occur

in Montezuma and La Plata counties due to increased levels of tourism by 1994. Social consequences are expected to be inconsequential given the minimal extent of economic changes.

Table 3-3. Economic Impacts of the Resource Conservation Alternative.

Income sources	Population		Employment		Per capita income (1983 dollars)		Total personal income - (thousands of 1983 dollars)	
	1994	2000	1994	2000	1994	2000	1994	2000
Hunting	0	0	0	0	0	0	0	0
Grazing	4	4	1	1	0	0	9	10
Fishing	4	3	104	107	-5	-5	1,715	1,883
Tourism	857	756	394	407	-11	-12	7,672	8,317
Oil & Gas	0	0	0	0	0	0	0	0
Subtotal	865	763	499	515	-16	-17	9,396	10,210
Baseline	107,913	121,768	53,178	59,657	10,339	10,245	1,115,744	1,247,538
Total	108,778	122,531	53,677	60,172	10,323	10,228	1,125,140	1,257,748
Percent Change	0.8	0.6	0.9	0.8	0.0	0.0	0.8	0.8

Note: See Appendix 8 for methodology.
Source: BLM Data 1984.

Summary

The Resource Conservation Alternative projects BLM investments of $1.9 million with management emphasis on stabilizing range condition, wildlife habitat and fishery improvements, and recreation access by an increased number of tourists. A 400- to 500-person increase in population is projected in Montezuma and La Plata counties due to increased levels of tourism. No significant impacts are projected within any economic sector within the planning area.

ENVIRONMENTAL CONSEQUENCES--NO GRAZING SUBALTERNATIVE

NO GRAZING SUBALTERNATIVE--INTRODUCTION

It is expected that the No Grazing Subalternative would take a minimum of ten years to fully implement because of the extensive private fencing involved.

Soils and Water

Beneficial impacts to soils and water are expected. As more vegetation is established and plant vigor and cover increases, soil profiles will retain higher moisture holding capacities and nutrients as a result of additional deposits of organic matter. Soil productivity structure and permeability would improve and a reduction in on-site erosion rates would occur over the long term.

Favorable impacts to hydrologic processes affecting water quality and quantity would also be expected in the planning area. Precipitation would be detained longer by improved plant cover and infiltration rates may slowly increase over the long term. Overland flow velocities and qualities would be reduced as would storm runoff volumes during peak discharge. Stream course channel stability would improve as scour and bank erosion are decreased in frequency and magnitude. Most importantly, sediment discharges should decrease with increased vegetation cover and corresponding soil development.

Vegetation

In the long term, eliminating livestock grazing could be expected to increase the overall rate that the rangeland approaches ecological site potentials over that of any other alternative. Over the next 20 years, it is expected that approximately 220,000 acres in poor and fair condition could change to good and excellent condition through eliminating livestock grazing.

On a number of grazing allotments, overstocking, continuous spring use and a vigorous fire control program have left the rangeland in poor condition. Some of these areas (for example, pinyon-juniper and sagebrush sites) will require some type of land treatment before site potential and productivity can be restored within a reasonable time period. However, the remaining 40 percent of the rangelands in the planning area would be expected to respond faster.

Increases of mulch or dead plant materials are expected to show a dramatic, though unquantifiable, increase due to livestock's lack of consumption. This increased plant material could significantly increase the incidence and intensity of range fires.

Wild Horses

Wild horses would benefit in the short and long term due to an increased quality and quantity of vegetation available for use.

Wildlife (Terrestrial, Aquatic and Riparian)

Eliminating livestock grazing would affect wildlife by: (1) potential short term changes in forage availability, and (2) short- and long-term habitat changes resulting from plant successional trends being removed from effects of livestock grazing.

ENVIRONMENTAL CONSEQUENCES--NO GRAZING SUBALTERNATIVE

In the short term, ungulates may benefit from increased forage availability. Long-term changes would be expected in the vegetation structure and plant diversity of the various wildlife habitat, which should result in more stable, healthy herds. Overall habitat conditions on nonwinter ranges and 50 percent of winter range habitat could be expected to improve, assuming stable numbers of wildlife.

Potentially significant adverse impacts may occur to big game populations, because approximately 2,000 miles of fences will be installed. Unregulated fencing (not to BLM specifications) could inhibit migration and passage of several big game species.

Eliminating livestock grazing could have beneficial impacts to nesting birds and adverse impacts to small mammals due to vegetational changes.

Aquatic and riparian habitat would be expected to improve substantially within 10 to 15 years after livestock are removed. Improved riparian vegetation cover and diversity, increased streambank stability and reduced stream siltation are all expected benefits. Water quality would also improve, providing direct benefits to fish and all other wildlife that depend on these critical perennial and intermittent streams.

Threatened and Endangered Plant and Animal Species

The impacts of removing livestock from public range to threatened and endangered plant or animal species are unknown. Not enough information is available concerning the population biology of these species. The Federally listed plants in the planning area presently exist in both grazed and ungrazed areas.

Cultural Resources

No significant impacts from removing livestock would be expected. The absence of livestock movement may positively affect cultural resources by decreasing site erosion, rubbing and artifact breakage. Any fencing on Federal lands would be subject to environmental assessment and impact mitigation.

Forestry

Twenty-four thousand acres of woodland formerly maintained in treatments for livestock would be available for intensive woodland management.

Recreation

Over the long term, it is expected that this alternative could result in some increases in big game hunter and viewing recreational days.

Visual Resources

Adverse impacts to visual resources may result as extensive fencing is completed to exclude livestock from public lands.

ENVIRONMENTAL CONSEQUENCES--NO GRAZING SUBALTERNATIVE

Wilderness

Wilderness values (i.e., solitude, naturalness, etc.) could be enhanced with overall positive impacts due to removing most of man's influences (i.e., fencing, range improvements, etc.) associated with livestock grazing.

Economics

The San Juan/San Miguel planning area has 176 BLM grazing permits, with a total of 64,232 AUMs accounting for 3.7 percent of all AUMs. Estimates are that 65 percent of BLM permittees depend on public lands for 10 percent or less of their forage needs, while 20 percent depend on these lands for 25 percent to 50 percent of their needs. Additionally, 15 percent depend on BLM for more than 50 percent of their forage needs. (BLM Estimates 1984 and Colorado Department of Agriculture 1982).

For most permit holders, BLM forage, though limited, is used during those critical times of the year when no other forage is available, such as in the spring when USFS lands in the high country are not yet open. The stock must be moved out of the privately owned valley bottoms so that hay crops can be started.

The loss of critical, seasonal pasture could have devastating effects to the economic stability of many ranches. If a No Grazing Subalternative were implemented, as many as 25 percent of the permit holders would have to drastically cut operations or could even be forced out of business. Many of the ranches that would go out of business may be purchased and consolidated with existing corporate ranches, potentially recovering some of the expected revenue loss. However, a substantial portion of the total ranch revenue in the planning area would be lost over the long term (5 years after terminating the grazing permits/leases). Those permittees depending on BLM lands for 25 percent of their forage needs are large operators, using more than 70 percent of BLM grazing lands within the planning area.

For generations, the political and social life of southwest Colorado has been oriented strongly to a ranching way of life, and the ranching ethos has long been a dominant political and social influence in this isolated high country. Families living on ranches are well integrated into the fabric of the area. The loss of such a high proportion of ranchers would thus cause drastic social changes, disrupting most of the familiar social networks and bringing chaotic change to the still-strong traditional value system.

It is difficult to imagine another action BLM could take that would be as unpopular or as likely to affect the local social system as dramatically or negatively as would withdrawing grazing permits.

ECOLOGICAL REPRESENTATION SUBALTERNATIVE--INTRODUCTION

The Ecological Representation Subalternative was developed primarily to study and analyze the need and potential of the WSAs to contribute to expanding the diversity of the NWPS. In this alternative, Cross Canyon, Dolores River Canyon, McKenna Peak, and Weber Mountain WSAs would be recommended suitable for wilderness designation, using the Wilderness Manageability Alternative boundaries as described in the Wilderness Technical Supplement. Cahone Canyon, Menefee Mountain, Squaw/Papoose Canyon, and Tabeguache Creek WSAs would be recommended nonsuitable for wilderness designation; the proposed management

of these areas is described under the Preferred Alternative in the Wilderness Technical Supplement.

The following resources have no significant impacts or are previously discussed in the Resource Conservation Alternative--livestock grazing, forestry, visual resources, fire, and economics.

Energy and Minerals

Designating the four WSAs as wilderness would have the following impacts to mineral resources (see Table 3-1 for potential resources within the WSAs):

(1) Withdrawing potential coal resources within Weber Mountain WSA would result in a loss of approximately 33 million tons, which represents approximately 6 percent of the total estimated reserves in the Durango KRCRA (from Mesa Verde National Park to Hesperus). Impacts would be for the long term.

(2) Withdrawing oil and gas leasing in the four WSAs would result in a possible loss of 2.4 million barrels of oil, 5.6 billion cubic feet of gas, and some potential unknown losses of CO_2. Pre-FLPMA oil and gas leases in Cross Canyon and Weber Mountain WSAs would be developed during the term of this plan and would result in some of the reserves being produced and not lost due to Congressional withdrawal. Approximately 70 percent of Cross Canyon and 36 percent of Weber Mountain WSAs are covered by pre-FLPMA leases. It is assumed that a similar proportion of the oil and gas reserves would be recovered if development of the leases occurred (see Resource Conservation Alternative for details). No reserves have been included for McKenna Peak WSA because it was determined that low potential exists for these resources (oil and gas and CO_2). Impacts would be for the long term.

(3) Withdrawing from future mineral entry by wilderness designation would greatly affect mineral development in the Cross Canyon and Dolores River Canyon WSAs, as Cross Canyon WSA has a high favorability for occurrence of uranium and vanadium mineralization and Dolores River Canyon WSA has a high favorability for occurrence of base and precious metals, as well as uranium and vanadium in the Chinle Formation. The greatest long-term impacts would be from designating the Cross Canyon WSA as wilderness. Exploration drilling by Western Nuclear, Inc., has indicated that a uranium ore body possibly extends into this WSA.

(4) Designating these four WSAs as wilderness could preclude developing the leasable and locatable minerals, with the exception of pre-FLPMA leases or pre-FLPMA claims with a valid discovery.

Nondesignating the other four WSAs (Menefee Mountain, Cahone and Squaw/Papoose canyons, and Tabeguache Creek) as wilderness (see the Proposed Plan discussion) will have the following impacts to the mineral resources:

(1) No leasing of coal resources within Menefee Mountain WSA would result in a loss of approximately 62 million tons not available for leasing in the immediate future, which represents approximately 6.5 percent of the total estimated reserves in the Durango KRCRA. Impacts would be for the long term.

(2) No-surface occupancy leasing for oil and gas in the four WSAs would result in a possible loss of oil, gas, and CO_2 reserves. Some of this loss could be mitigated by well spacing and future technology methods for directional drilling outside of the WSAs. No reserves have been included because it would be impossible to estimate losses for these resources (oil and gas and CO_2) if future technology would allow their development. Impacts would be for the long term.

(3) All four WSAs would remain open to mineral entry, which would beneficially affect minerals availability in Squaw/Papoose Canyon WSA, which has high favorability for occurrence of uranium and vanadium mineralization. Pre-FLPMA leases could still be developed for two of the WSAs (Cahone and Squaw/Papoose canyons). A moderate to high probability exists that development will occur during the term of the plan in these two WSAs. Tabeguache Creek and Menefee Mountain WSAs have no pre-FLPMA leases. Tabeguache Creek WSA would be designated as an Outstanding Natural Area.

Summary

For those four WSAs recommended suitable for wilderness designation, adverse impacts to minerals are the future withdrawals from mineral entry and mineral leasing of oil and gas and CO_2 and coal, with the exception of pre-FLPMA leases and pre-FLPMA mining claims with a valid discovery. All impacts would be for the long term.

For those four WSAs recommended nonsuitable for wilderness designation, significant, adverse impacts (all for the long term) to minerals are no mineral leasing of oil and gas, CO_2 and coal, with the exception of pre-FLPMA leases. These areas will remain open to mineral entry, a beneficial impact.

Vegetation

Wilderness designation of the four WSAs would have long-term, positive impacts to vegetation, as it would afford some protection from impacts associated with mineral development. Some negative impacts to vegetation could occur within the four WSAs recommended as nonsuitable for wilderness designation, since these areas would remain open to mineral entry and possible mineral development.

Soils and Water

Wilderness designation of the four WSAs would have long-term, positive impacts to soils and water; this would afford some protection from impacts associated with mineral development. Some negative impacts to soils and water could occur within the four WSAs recommended as nonsuitable for wilderness designation, since these areas would remain open to mineral entry and possible mineral development.

Terrestrial Wildlife

Wilderness designation of the four WSAs would have long-term positive impacts to undeveloped wildlife habitat. Nonwilderness designation of four WSAs could result in road development and habitat loss associated with locatable mining activities.

ENVIRONMENTAL CONSEQUENCES--ECOLOGICAL REPRESENTATION SUBALTERNATIVE

Aquatic Wildlife

Wilderness designation of Cross Canyon WSA could adversely affect constructing aquatic and riparian habitat improvements as no mechanized or mechanical equipment would be allowed. Nonimpairing types of habitat improvements could still occur; thus, these impacts would be minimal. Otherwise, no significant impacts would occur.

Wild Horses

Wilderness designation of McKenna Peak WSA could have potential, long-term impacts to the Spring Creek herd by limiting the management techniques and facilities in the eastern portion of the wild horse area. There are no wild horses in the other seven WSAs; thus, there would be no impacts.

Recreation

Wilderness designation of the four WSAs would have both positive and negative impacts to recreation. Designation would provide significantly increased opportunities for primitive types of recreation in a variety of settings and ecotypes which are atypical of existing wilderness. Some motorized recreation use would be foregone, but this would not be significant.

Nonwilderness designation of four WSAs could adversely affect the primitive recreation experience as a result of road development and landscape alteration associated with locatable mining activities. Some motorized recreation use would be foregone, but this would not be significant.

Lands

Impacts to lands associated with wilderness designation for four WSAs would be essentially the same as those described under the Resource Conservation Alternative, but to a lesser degree. There would be no significant impacts to the WSAs recommended nonsuitable for wilderness designation.

Cultural Resources

Wilderness designation of four WSAs would have long-term, positive impacts to cultural resources due primarily to reductions in vandalism because of decreased vehicle access. Beneficial impacts will be especially significant in Cross Canyon and Dolores River Canyon WSAs.

Nonwilderness designation of four WSAs, because they would be closed to ORV use, would have positive impacts to cultural resources. Beneficial impacts will be especially significant for Cahone Canyon, Squaw/Papoose Canyon, and Tabeguache Creek WSAs. However, nondesignation of these WSAs could allow increased development activities through locatable minerals; thus, increased vehicle access could adversely affect cultural sites due to increased vandalism.

ENVIRONMENTAL CONSEQUENCES--ECOLOGICAL REPRESENTATION SUBALTERNATIVE

Wilderness

Wilderness designation of the four WSAs (Cross Canyon, Dolores River Canyon, McKenna Peak, and Weber Mountain) would in the short term, and especially the long term, protect and preserve the wilderness values of these areas. In addition, they would add greatly to the diversity of the NWPS. Their contribution as wilderness resources are of local, regional, and national significance.

Cross Canyon WSA is associated with deep canyon topography in the pinyon-juniper woodland and Great Basin sagebrush of the Colorado Plateau Province. Currently, there are no designated wilderness areas which include a representation of the Great Basin sagebrush. There are presently only two designated wilderness areas in the NWPS (and both in Colorado) containing the pinyon-juniper vegetation type: Black Canyon of the Gunnison and Mesa Verde Wilderness Areas, totaling less than 20,000 acres. Mesa Verde's wilderness area is not open to public use and the Black Canyon of the Gunnison has limited access due to nearly vertical canyon walls; accessible primarily to climbers and parachutists. Therefore, Cross Canyon WSA would be an extremely important addition to the NWPS by filling a current ecological void. Additionally, its supplemental values (Anasazi ruins and artifacts and aquatic and terrestrial wildlife habitat) would make this area, in combination with its ecological community, a culturally significant and unique addition to the wilderness system. There is no potential wilderness area within the Colorado Plateau Province which includes the same combination of ecological and supplemental values, with the exception of Squaw/Papoose Canyon and Cahone Canyon WSAs.

Dolores River Canyon WSA is associated with steep-walled, deep canyon topography in the pinyon-juniper woodland and Great Basin sagebrush of the Colorado Plateau Province. Ecologically, as described above for Cross Canyon, this area would fill a present void in the NWPS. The supplemental values of the Dolores River Canyon WSA (cultural and historic features, geologic features, wildlife habitat, and sensitive plant species), in combination with its ecological community, would present an impressive and unique addition to the wilderness system. There is no potential wilderness area currently under study that includes the same combination of ecological and supplemental values.

McKenna Peak WSA is an extremely rugged badlands-type topography in a transitional zone between the Colorado Plateau and Rocky Mountain Forest provinces. It includes three primary vegetation types--saltbush-greasewood, mountain mahogany-oak scrub, and pinyon-juniper woodland. Presently, there is only one designated wilderness area that contains a representation of the saltbush-greasewood vegetation type--Great Sand Dunes National Monument in Colorado, which contains approximately 18,000 acres within its wilderness area. Within the NWPS, only one area contains a representation of the mountain mahogany-oak scrub vegetation type; Lone Peak Wilderness in Utah, which contains approximately 30,000 acres. Ecologically, McKenna Peak WSA would add greatly to the geographic distribution of vegetation types not presently well represented in the NWPS. The supplemental values of McKenna Peak WSA (containing a wild horse herd, fossils, geologic features, and winter wildlife habitat), in combination with its ecological community, would present a different and unique addition to the wilderness system. There is no potential wilderness area currently under study that includes the same combination of ecological and supplemental values.

Weber Mountain WSA is associated with mountain topography in a transition zone between the Colorado Plateau and Rocky Mountain Forest provinces and includes two primary vegetation types--pinyon-juniper woodland and mountain mahogany-oak scrub. As described

above for McKenna Peak WSA, mountain mahogany-oak scrub is not well represented either in acreage or geographically within the NWPS. The supplemental values of Weber Mountain WSA (cultural features, winter wildlife habitat, and nearness to Mesa Verde National Park), in combination with its ecological community, would present a unique natural environment to the NWPS. There is no potential wilderness area currently under study that includes the same combination of ecological and supplemental values, with the exception of Menefee Mountain WSA.

The impacts of improving the diversity of the NWPS by designating these four areas as wilderness would be beneficial.

Wilderness designation would benefit nonmotorized recreation users by increasing opportunities for solitude and primitive recreation and offering a different season-of-use than the high mountain wilderness areas of the San Juan Mountains in southwestern Colorado.

With the exception of pre-FLPMA valid existing mineral rights, prohibiting future mining and mineral leasing would protect and preserve the wilderness values for future generations.

Disposing of public land and impairing ROWs would not be allowed and this would protect the values of the wilderness resource.

All four of the WSAs are manageable as wilderness as far as topography and vegetation resources. If the pre-FLPMA leases in Cross Canyon WSA are developed, managing the area as wilderness would be difficult. The possibility of development of pre-FLPMA leases in Weber Mountain WSA could cause future management problems but to a lesser degree than in Cross Canyon WSA due to topographic limitations. The Dolores River Canyon WSA is deemed manageable as wilderness due primarily to its extreme topographic limitation. McKenna Peak WSA would be manageable as wilderness since mining claims and pre-FLPMA oil and gas leases are minimal.

Nonwilderness designation of the four WSAs (Cahone Canyon, Menefee Mountain, Squaw/Papoose Canyon, and Tabeguache Creek) would result in the loss of wilderness values for the long term.

The ability of these areas to add to the present diversity of the NWPS would be foregone; however, it is felt that by recommending Cross Canyon, Dolores River Canyon, McKenna Peak, and Weber Mountain WSAs suitable as wilderness, plus recommending Tabeguache Creek WSA as an Outstanding Natural Area (560 acres would be withdrawn from mineral entry), those impacts to ecological diversity and supplemental values would be reduced. However, there would still be a long-term loss of ecological systems and supplemental values of these specific areas.

Harvesting forestry products would not be encouraged on the nonsuitable WSAs; however, limited impacts to wilderness values could occur due to removing wood products.

Mineral development could occur in these four areas as they would remain open to mineral entry (with the exception of 560 acres of Tabeguache Creek Canyon WSA). If development occurred, there would be adverse impacts to the wilderness resources, which would be long-term, irreversible and irretrievable impacts to the wilderness resources.

ENVIRONMENTAL CONSEQUENCES--ECOLOGICAL REPRESENTATION SUBALTERNATIVE

The WSAs recommended nonsuitable would receive VRM Class II management protection during ROW construction, which does not preclude developing ROWs which could adversely affect wilderness values.

Summary

For those WSAs recommended suitable for wilderness designation (Cross Canyon, Dolores River Canyon, McKenna Peak, and Weber Mountain), there would be both short- and long-term beneficial impacts to the wilderness resource by preserving the natural values, outstanding opportunities for solitude and primitive recreation, and expanding the diversity in the NWPS.

For those WSAs recommended nonsuitable for wilderness designation (Cahone Canyon, Menefee Mountain, Squaw/Papoose Canyon, and Tabeguache Creek), there would be long-term, irreversible and irretrievable impacts to the wilderness values due primarily to possible mineral development and(or) ROW construction. This would be considered a permanent loss of a significant natural resource.

ENVIRONMENTAL CONSEQUENCES--RESOURCE UTILIZATION ALTERNATIVE

RESOURCE UTILIZATION ALTERNATIVE--INTRODUCTION

This alternative emphasizes mineral exploration and development, livestock grazing use and land disposal, although multiple uses would continue. Resource values contributing to local and regional economy would be favored.

Energy and Minerals

The impacts to wildlife, travel restrictions, and cultural impacts under this alternative are similar to the Resource Conservation Alternative.

No-surface occupancy stipulations imposed on the Dolores River Canyon SRMA would result in 50,000 acres unavailable for oil and gas exploration, development, and production (4% of planning area). The Dolores River Canyon is estimated as having potential gas reserves of 4.2 billion cubic feet. Not allowing exploration, development, and production would result in a potential loss of this resource and impacts would be for the long term.

Disposing of public lands (and reserving the minerals to the Federal government) will result in 33,000 additional acres of split estate management, adding approximately 11 percent more split estate lands than currently exist. Impacts would be for the long term.

Federal coal available for exploration and development would exist on 1,880 acres in the East Cortez KRCRA, 1,480 acres in the Nucla KRCRA, and 54,000 acres in the Durango KRCRA. Additional sand and gravel resources would be available on Ewing Mesa to help meet the demand in the Durango area.

Summary

The significant impact of this alternative is the no-surface occupancy designation of the Dolores River Canyon SRMA, which could result in a potential loss of 4.2 billion cubic feet of gas reserves.

Vegetation

The only significant short-term impacts to vegetation that would occur are projected increases in the vigor of preferred forage plants, where livestock reductions would result in lowered levels of utilization.

Impacts to vegetation would be similar to those listed under the Resource Conservation Alternative, except with more intensive management a substantial number of sites would be converted from poor to fair condition and from fair to good condition (Fig. 3-2 projects expected changes in vegetation condition in the long term).

Proposed range improvements and treatments would be necessary to implement management actions and would have positive impacts to vegetation. Many of these projected improvements would lead to improved livestock distribution and the production of better quality and quantity of forage. Additional forage may be produced as a result of timber and woodland harvesting. Proposed watershed improvement and wildlife treatments would have long-term positive impacts to vegetation. Increased vegetation densities, productivity, and available forage will result from the proposed treatments.

In the long term, removing horses from the two herd areas would beneficially affect vegetation densities, reproduction, and productivity, causing an increase in forage available for livestock and big game use in both the short and long term.

Summary

In the long term, the overall types and productivity of forage species produced on public lands would improve under this alternative. Properly placing and designing improvement projects could lessen some of the possibly adverse impacts to vegetation.

Soils and Water

Most impacts to soils and water are similar to those listed under the Resource Conservation Alternative. Opportunities for soils and water management in the WSAs would exist. Development potential resulting from nonwilderness designation for WSAs could result in accelerated erosion and impacts to water quality such as higher sediment yields.

Summary

Implementing the Resource Utilization Alternative would result in decreases in erosion, sediment, and salinity yields and would provide protection for domestic and municipal water sources.

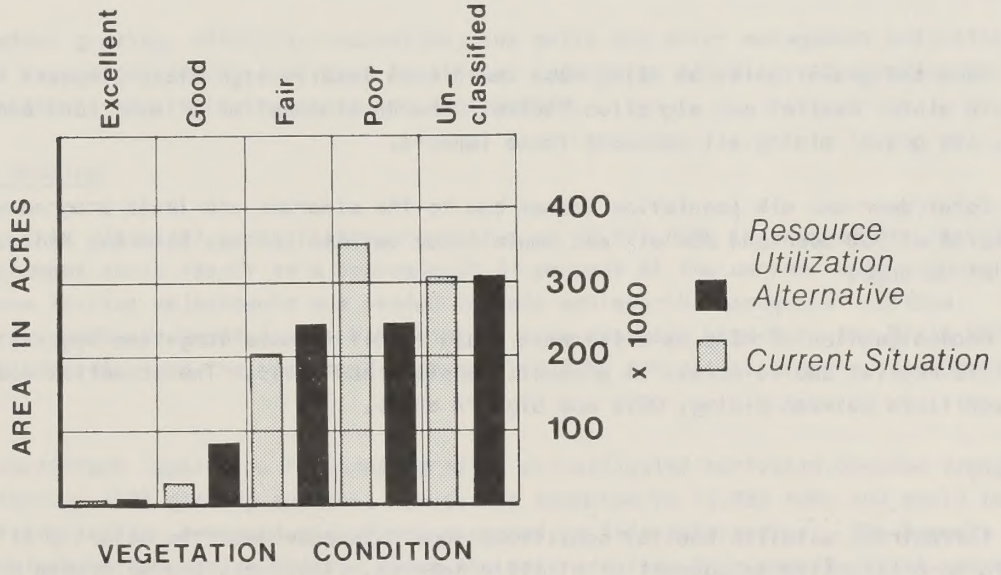

Figure 3-2. Long-term changes in vegetation condition under the Resource Utilization Alternative.

ENVIRONMENTAL CONSEQUENCES--RESOURCE UTILIZATION ALTERNATIVE

Terrestrial Wildlife

Most impacts to terrestrial wildlife are similar to those listed under the Resource Conservation Alternative. Implementing AMPs and the wildlife program and removing wild horses would improve range and habitat condition on 850,000 acres. Big game populations would increase by 4,000 deer, 1,400 elk, 325 pronghorn antelope, and 500 bighorn sheep due to improvements in forage production.

As much as 27,450 acres would be treated under wildlife program funding; 5,600 acres of this would be new chainings that could cause significant impacts to nongame species. Approximately 2 miles of riparian habitat would be improved with instream structures. Water development would improve 9,600 acres of habitat.

Land exchanges or sales would eliminate 3 percent of existing wildlife habitat and 12.75 miles of riparian habitat. Riparian habitat losses would be significant because of limited availability of the habitat type and high potential for improvements on some tracts. Crucial big game winter range losses (on 1,560 acres) would be locally significant and cumulative with coal development near Cortez and private land development. Land disposal would reduce options for coal development mitigation and would likely increase mitigation costs. Approximately 1,080 acres within big game migration routes between Durango and Bayfield would be lost, adding to significant impacts to private land development and proposed sand and gravel mining.

Coal leasing in the East Cortez KRCRA in conjunction with private land development and public land exchanges or sales could cause locally significant reductions of deer and elk.

Sand and gravel sales on Ewing Mesa could have locally significant impacts to deer and elk winter habitat and migration routes. The development of private land and coal, sand, and gravel mining all compound these impacts.

Total deer and elk population losses due to the minerals and lands program are estimated at 900 deer and 300 elk and would occur between Cortez, Dolores, Mancos, and east of Durango.

Nondesignation of WSAs as wilderness would result in some long-term degradation of wildlife habitat due to access in presently undisturbed areas. The potential would exist for conflicts between mining, ORVs and bighorn sheep.

Summary

Terrestrial wildlife habitat conditions should improve over the majority of the area due to more intensive management of wildlife habitat, livestock, and watershed areas. Habitat improvement should increase big game herds. River otters, bald eagles, and peregrine falcons should benefit from provided protection. Coal mining near Cortez and land exchanges or sales could cause losses of locally important big game and riparian habitat.

Aquatic and Riparian Wildlife

Impacts due to range management activities will be similar to those described under the Resource Conservation Alternative. However, beneficial impacts will be realized to a

greater degree due to the increased number of AMPs to be implemented in this alternative. Some continued deterioration of habitat quality is expected to occur until AMPs are effectively implemented.

Wildlife management activities are expected to have significant, positive impacts to at least 400 miles of aquatic and riparian habitat and will generally improve the quality of the fishery resource within the area. Additional inventories need to be conducted on uninventoried streams.

Impacts resulting from recreation and forestry management and soils and water activities will be similar in nature to those noted under the Resource Conservation Alternative.

Depending on mine plans and locations, the potential exists for increased impacts to aquatic and riparian habitat in mineral development areas. Although impacts are unquantifiable at this time, they may be assessed after reviewing operational plans for mining or activity plans for the resource on case-by-case bases. Many of these significant impacts are expected to be mitigated under current regulations.

Impacts in specific areas due to wild horse utilization may be assessed only after activity plans are developed and monitoring studies have been implemented. However, with recommended herd removal under this alternative, no significant impacts are anticipated to the aquatic and riparian resources.

Summary

Livestock grazing, wildlife, recreation, and soils and water management activities should all have significant, long-term beneficial impacts to 400 miles of aquatic and riparian habitat, once activity plans are implemented.

Livestock Grazing

Under this alternative, an initial reduction of 19,819 AUMs is proposed in livestock grazing; changes would result in a decrease of 31 percent of the current active preference. These initial adjustments are needed to help achieve the management actions developed for each allotment in the "I" Category (see Appendix Nine-D in the Draft RMP). Appendix Nine-E displays the recommended changes in AUMs for all allotments (see Draft RMP).

The short-term impacts to livestock grazing are mitigated partially because during the 1980 through 1982 grazing seasons, nonuse has amounted to 13,881 AUMs and would be a portion of the initial downward adjustment proposed in this alternative. The impacts would therefore be somewhat mitigated since the net reduction from recent actual use would be approximately 5,938 AUMs.

In the long term, 90,109 AUMs would be made available for livestock use (or increase of 29 percent of current active preference). This projected increase of livestock forage is dependent on implementing grazing systems, installing range improvements, and establishing land treatments to increase forage productivity, improve distribution patterns, and convert potentially suitable sites to suitable (see Table 3-4 for initial and long-term changes proposed in current active preference).

Table 3-4. Changes in Grazing Use Under the Resource Utilization Alternative.

Grazing Use	Total AUMs	Net change AUMs	Net change Percent
Current active preference	64,232	--	--
Initial adjustment	44,413	19,819	-31
Long-term adjustment	90,109	25,877	+29

Source: BLM Data 1984

The impacts to each livestock operator would vary according to how grazing use in the allotment fits into the yearlong ranch operation. Increases or decreases of more than 15 percent of current authorized use would normally be phased in over a five-year period, thus allowing the operator to secure alternative pasture or forage and(or) to reduce herd size.

Summary

Short-term impacts to livestock grazing are partly mitigated by the nonuse that has typically occurred; however, there would be a loss to livestock operators because of lowered livestock production.

In the long term, livestock operations should realize gains through significant increases in livestock production. Through proper mitigation, most potentially adverse impacts to livestock grazing could be avoided.

Wild Horses

Under this alternative, wild horses would be removed from both the Spring Creek and Naturita Ridge herd areas. In the short and long term, wild horses would be removed from the natural ecological system and would not be available for public viewing.

In the long term, removing horses would beneficially affect vegetation densities, reproduction, and productivity. There would be an increase in forage available for livestock and big game use in both the short and long term.

Summary

Wild horses would be removed and would not be available for public viewing in the short and long term.

Forestry

Range maintenance of existing chaining reduces the potential woodland production by eradicating young pinyon-juniper stands. Since this acreage is not part of the woodland base, these actions would have no impacts to the sustained yield harvest level. Chaining

of mature pinyon-juniper will reduce the sustained yield base. Range will chain 5,700 acres of pinyon-juniper in the planning decade, which will reduce the woodland base by 13 percent and result in a production loss of 172 cords per year over the long term.

Burning existing chaining for wildlife habitat improvement will reduce the potential woodland production. Since this acreage is not part of the woodland base, these actions would have no impacts to the sustained yield harvest level. Burning and crushing stagnated oak stands can eventually result in species and growth more favorable to forestry. These impacts are not significant. Chaining and burning of mature pinyon-juniper will reduce the sustained yield base.

The wildlife program proposes to chain or burn 6,850 acres of pinyon-juniper in the planning decade, which will reduce the woodland base by 16 percent and result in a production loss of 207 cords per year over the long term. Assuming these treatments continue, the woodland base could be reduced over the long term.

Areas with special recreation values, including Silverton and the Dolores River, are withdrawn from timber and woodland production. Wood fiber production loss as a result of these withdrawals is approximately 112 MBF each year. When looking at the total timber and woodland production for the region, a yearly loss of 112 MBF is insignificant.

Land actions (exchanges or sales) could reduce the commercial timber base by 37 percent and result in a production loss of 248 MBF per year, and the woodland base could be reduced by 11 percent with a production loss of 136 cords per year, not significant impacts.

Placing commercial forest under intensive management should result in future yields that are double the existing unmanaged stand yields. Timber yield increases associated with the small BLM timber base is insignificant when compared with total timber production for this region. Placing the woodland species under management is significant because, for the first time, the woodland base is recognized as a legitimate resource and will be managed for a sustained yield of wood fiber.

Summary

Total forest production loss associated with existing and proposed management actions could be 618 MBF per year (1,236 cords/yr). When compared with the expected yearly demand of 35 MMBF and anticipated timber production by private, State and Federal agencies, this loss is insignificant. Vegetation treatment by range, wildlife and land actions could reduce the woodland sustained yield base by 40 percent in the planning decade. Two additional decades of similar treatments could eliminate the woodland base.

Recreation

Livestock grazing, cultural resources, mineral, land disposal, forestry, and soils and water impacts would be similar to those listed under the Resource Conservation Alternative. Wildlife management impacts would be similar to those listed under the Resource Conservation Alternative, except with an increase of 15,000 user days.

Removing wild horses would have long-term negative impacts to recreation by eliminating viewing and interpretation opportunities.

ENVIRONMENTAL CONSEQUENCES--RESOURCE UTILIZATION ALTERNATIVE

Summary

Protecting and enhancing recreation resources by management and development restrictions would have long-term, positive impacts to recreation. Since no WSAs would be recommended for wilderness, the need for those recreation settings and opportunities would continue.

Cultural Resources

Not designating any of the eight WSAs may have permanent effects on an undetermined number of archaeologic and historic sites. If no access restrictions are imposed, many sites will be vandalized, assuming that there are no increases in patrol. ORV closures on Squaw/Papoose, Cahone and Cross canyons and Tabeguache Creek WSAs will somewhat reduce these impacts. Impacts to the Dolores River Canyon WSA due to recreation uses will still occur and these may be significant.

Increases in livestock grazing and AMPs will likely have permanent effects on an unknown number of archaeologic and historic sites, unless mitigation measures are implemented. Increases in livestock numbers will affect sites via trampling, especially in high site density areas and near water sources. Additional measures will need to be taken to fence sites and redistribute livestock to avoid damaging significant cultural values. Intensive inventories near major water sources would be needed to monitor and assess damages. If these types of avoidance measures are taken, no significant impacts will occur.

Maintaining 23,800 acres of vegetation treatments may permanently damage 1,500 archaeologic and historic sites to some degree. Avoidance measures will be undertaken via stipulations and inventories. Some inadvertent damage may result due to dense concentration of sites, especially in the Sacred Mountain area. Adequate inventory levels and closely monitoring treatments will be necessary to avoid significant impacts to these sites.

The 28,000 acres of new proposed vegetation treatment may have permanent impacts to 1,750 archaeologic and historic sites. Avoidance of sites via adequate inventories and stipulations will ensure that direct impacts are avoided. Some impacts can be expected from increases in access into remote areas and inadvertent damage during treatment; however, increases in monitoring and treatment supervision will keep these impact levels low.

CRMP development and increases in operating budgets will have major, long-term positive impacts to approximately 1,430 sites within Dolores Cave, Bull, Sand and East Rock canyons; Indian Henry's Cabin; McLean Basin; Hamilton and Mockingbird mesas; Painted Hand Petroglyphs; Hanging Flume; Lightning Tree Tower Group; Cannonball, Lowry, Escalante-Dominguez, and Painted Hand ruins; Tabeguache Pueblo; Cahone, Squaw/Papoose, Cross and Dolores River canyons; and Tabeguache Creek areas. As a result of CRMPs and increases in funding for implementation, stabilization to prevent structural deterioration, patrol to prevent vandalism, and inventory and mapping will provide for more efficient and effective protection and use of these important areas.

Managing the Silverton and Dolores River Canyon SRMAs will likely have long-term advantages for more than 90 archaeologic and historic sites. Cooperative CRMPs should be developed to channel visitors and provide for site protection and visitor safety. No

significant impacts are expected from SRMA management for the Silverton area, although management will be significant for the Dolores River corridor. Road closures will have impacts through reducing levels of vandalism and visitor access.

Encouraging commercial use on the Dolores River will likely have permanent effects on approximately 15 archaeologic and historic sites. Emphasis on more use will increase inadvertent impacts and vandalism to cultural sites, especially those near major campsites and access points, which could result in significant impacts unless patrol efforts or monitoring levels are increased as well. Planning for visitor control in these areas will also reduce the chances of impacts to these sites. Adequate inventories are currently lacking to properly assess damage extents.

Improving access roads and visitor facilities will have permanent effects on an unknown number of archaeologic and historic sites. Access upgrading has significant impacts to sites due to increases in vandalism if not monitored closely. These impacts will be greater in the Sacred Mountain area where sites are dense or in the Dolores River corridor where visitors are confined. There will be less impacts in the Silverton area but these impacts may remain significant if a corresponding increase in patrol is not implemented. There is also a significant lack of inventory data for the Silverton area; therefore, impacts are difficult to assess.

Interpreting cultural sites for recreation will likely have positive, long-term benefits. Public attention and education involving cultural resources will reduce vandalism. For all areas, these are significant, positive impacts.

Disposing of 33,000 acres of public lands will have no significant impacts to archaeologic, sacred, or historic sites. All impacts will be avoided or mitigated with Class III surveys and data recovery if needed.

Managing 50,000 acres in the Disappointment Valley and Dry Creek areas to reduce erosion and sedimentation may have permanent impacts to 156 archaeologic sites. Inadvertent damage can be expected, but with monitoring and adequate inventory data, these impacts should not be significant.

Managing 17,000 acres for salinity control may have permanent impacts to 65 archaeologic and historic sites. These would result from inadvertent activity related to project installation and will be greatly reduced with adequate inventories and closely supervising construction. Most of the projects will be in low site density areas.

Developing watershed management plans will likely have long-term, positive impacts to an unknown number of archaeologic and historic sites. Through management plans, effects on some sites from erosion can be avoided or mitigated before information loss occurs. These impacts are probably not significant over the short term but could be over the long term.

Reclaiming streams where acid problems exist in the Upper Animas River drainage may result in permanent damage to one or two historic sites; however, the damage potential is low and would result from inadvertent actions. Inventories will help avoid direct impacts.

ENVIRONMENTAL CONSEQUENCES--RESOURCE UTILIZATION ALTERNATIVE

With 4,760 acres per decade of commercial and noncommercial sales, there is a moderate likelihood that 52 archaeologic and historic sites will suffer some form of permanent damage. This will not be significant if adequate inventory data are accumulated to provide for their avoidance and possible mitigation and if close supervision of the timber sales is undertaken. Inadvertent impacts will likely occur in some cases where increases in access will bring vandals to the sites--impacts that are not expected to be high for the proposed acreages as they lie in low site density areas. Impacts from noncommercial wood cutting are similar to those listed under the Resource Conservation Alternative.

Impacts from aquatic improvements will be similar to those impacts listed under the Resource Conservation Alternative.

Habitat improvements via plowing, burning, and seeding (with some oak crushing) on 27,450 acres may have permanent effects on approximately 472 archaeologic and historic sites. These habitat improvements are proposed in low site density areas, however, and all surface-disturbing treatments will be inventoried and impacts avoided or mitigated. With large land treatments, however, some inadvertent damage may occur. These impacts could be significant unless close monitoring of the project and an adequate amount of inventory are done.

Oil and gas recovery will increase levels of impact and sites to an estimated 15,000 sites, impacts that will be permanent and highly probable. Site-specific direct impacts will be avoided or mitigated on case-by-case bases. However, significant impacts to sites will continue to occur from increases in access which brings vandals to the sites, especially evident in high site density areas such as the Sacred Mountain and parts of the Disappointment Valley and Paradox areas. With no increases in patrol and monitoring, these will continue to be significant impacts. Mitigating measures similar to those discussed under the Resource Conservation Alternative could be used to limit impacts. Site-specific inventories as a result of the high levels of energy development have had positive effects on the data base for cultural resources information in the planning area, which has aided significantly in managing and protecting 700 cultural sites. However, net impacts of this development are still negative. Impacts to the setting of unique cultural values will occur where geographically confined areas previously unspoiled by intrusions are opened to mineral development. These impacts are significant, because only a handful of such areas remain unscathed.

Impacts to cultural resources from DOE lease tracts and hard rock mining would be similar to those listed under the Resource Conservation Alternative.

Continued sand and gravel operations (800 acres) and expanding gravel operation on Ewing Mesa (another 1,200 acres) will have permanent impacts to approximately 30 archaeologic and historic sites. Five to seven sites would require data recovery with no significant impacts. Approximately 25 sites will suffer impacts due to accessibility and visibility; increased levels of monitoring or total data recovery would reduce or eliminate these impacts.

Coal leasing and development of 1,480 acres near Nucla and 1,880 acres at East Cortez will affect approximately 150 sites. Since this would be a strip mining operation, data recovery on all sites may need to be undertaken; no adverse impacts would occur but data recovery would be costly.

Coal leasing on 54,000 acres in the Durango KRCRA may have permanent impacts to 330 archaeologic and historic sites. Since most mining here will be underground, impacts will be primarily from increased access for mining activity, which brings increases in vandalism and from subsidence. Inadvertent loss should be minimal. More attention to avoidance and data recovery should be given to areas with high potential for subsidence and sites near access roads and mine portals. Site-specific inventories will be necessary. Much of this land is private surface and will require coordination with the landowners for access to do inventory and evaluation and any other cultural resources work that is needed.

Summary

The Resource Utilization Alternative has the most potential for adverse effects to cultural values from the standpoint of project impacts. Developing CRMPs will reduce these impacts for a small percentage of sites. Increases in recreation and range planning will benefit cultural resources and reduce damage from livestock grazing and uncontrolled visitation. Some cultural areas could be developed for recreation use. Increases in access will significantly damage cultural resources in high site density areas such as the Sacred Mountain and Disappointment Valley areas. Increases in vegetation treatments will have significant impacts to cultural resources unless monitoring and inventory work are relatively increased.

Visual Resources

Approximately 50% of important landscapes are not identified in the Resource Utilization Alternative for special visual management, VRM Class I or II. This could result in construction project design with visual contrast levels in excess of what would be required to maintain the scenic quality. Other areas with important landscapes would receive VRM Class I or II management, which would maintain visual resources on 45 percent of the planning area.

Wilderness

Some continued and(or) increased motor vehicle use could create damage to soils, vegetation, and natural values, which would be mainly focused in Weber and Menefee mountain and McKenna Peak WSAs. All other WSAs would be closed to ORV use.

Intensive livestock management could change the natural landscape in Cross Canyon WSA and portions of McKenna Peak WSA, long-term impacts that could be potential losses of wilderness values.

The limited timber and(or) forestry product harvesting could cause losses of wilderness values, which would mainly apply to Weber and Menefee Mountain WSAs.

Developing coal reserves in Weber and Menefee Mountain WSAs and the development of oil and gas, and CO_2 in Cross, Cahone, and Squaw/Papoose Canyon WSAs could result in losses of wilderness values associated with these areas in the long term. The other WSAs all have low to moderate potential for oil and gas and could also be developed in the future, resulting in long-term irreversible and irretrievable impacts to the wilderness resource.

ENVIRONMENTAL CONSEQUENCES--RESOURCE UTILIZATION ALTERNATIVE

Developing locatable minerals could destroy wilderness values by changing the natural landscape, resulting in losses of naturalness. Associated activities could further cause losses of primitive and unconfined recreation and solitude opportunities. This would be most probable in the Dolores River, Squaw/Papoose, and Cross canyons, McKenna Peak, and Tabeguache Creek WSAs. These could be long-term, irreversible and irretrievable impacts to the resource. Issuing ROWs associated with energy development could cause losses of wilderness values.

All of the WSAs have a moderate to high potential for wilderness values to be degraded to the point where they would no longer be suitable for wilderness designation. This would result in losses of primitive recreation opportunities, solitude, naturalness and diversity in the NWPS.

Summary

The Resource Utilization Alternative would generally cause the wilderness resource of all eight WSAs to be potentially degraded to the point that, over the long term, the wilderness values presently existing would be lost due to mineral, wildlife, livestock grazing, and lands actions. These could be irreversible and irretrievable impacts to the resource.

Lands

Consolidating public lands through disposing of small isolated parcels of public land will improve the efficiency of land use authorizations by BLM. This will result in a lower cost per unit of issuing authorizations and will reflect a savings in monitoring the construction and rehabilitation phases of projects on BLM lands. Under this alternative, 3.3 percent of the public lands would be disposed of and(or) consolidated.

Fire

Impacts would be similar to those listed under the Resource Conservation Alternative. More pinyon-juniper and brush acreage being manipulated could result in larger wildfires because of greater potential for spread through continuous flash type of fuels.

Economics

BLM investments of $4.1 million over a ten-year period with management emphasis on all resources except wilderness will be projected under this alternative. These levels of investments and management emphasis would result in annual gains of approximately $18 million in 1994 and $19 million in 2000 in increased total personal income within the planning area.

Investments of $1.5 million in range, $375,000 in soils and water, and $1 million in wildlife habitat projects would increase animal numbers and consequent revenue from grazing allocation and hunting. Fishery investments of 1.25 million dollars would result in increased revenue from recreational fishing. Revenue from tourism increases $7.5 million.

Oil and gas exploration and production on public lands reach their highest level under this alternative with a projected annual increase in 1994 of $15 million. (Table 3-5 compares economic effects of this alternative to baseline projections for 1994 and

2000). It illustrates expected changes in population, employment, per capita income, and total personal income brought about by projected levels of hunting, grazing, fishing, tourism, and oil and gas activities. BLM management of public land is shown in Table 3-5 to cause no greater than a 1.6 percent change in any economic indicator when viewing the total planning area. No significant impacts are projected within any economic sector under this alternative. However, a rise in per capita income of 1983 dollars will occur in Dolores County by 1994. Social changes are expected to be inconsequential given the minimal economic changes.

Table 3-5. Economic Impacts Under the Resource Utilization Alternative.

Income sources	Population		Employment		Per capita income (1983 dollars)		Total personal income (thousands of 1983 dollars)	
Year	1994	2000	1994	2000	1994	2000	1994	2000
Hunting	43	53	21	22	0	0	377	433
Grazing	20	21	6	5	-2	-1	48	55
Fishing	8	5	203	210	-10	-10	3,356	3,683
Tourism	857	956	394	407	-11	-12	7,672	8,317
Oil & Gas	493	501	220	223	10	10	6,269	6,440
Subtotal	1,421	1,536	844	867	-13	-13	17,722	18,929
Baseline	107,913	121,768	53,178	59,657	10,339	10,245	1,115,744	1,247,538
Total	109,334	123,304	54,022	60,524	10,326	10,232	1,133,466	1,266,467
Percent Change	1.3	1.26	1.6	1.5	0	0	1.6	1.5

Note: See Appendix 8 for methodology.
Source: BLM Data 1984.

Summary

BLM management will result in increased revenues to the mineral and tourism activities; however, no significant impacts are projected within any economic sector within the planning area.

THIS HANGING FLUME ALONG THE SAN MIGUEL AND DOLORES RIVER CANYONS WAS PLACED ON THE NATIONAL REGISTER OF HISTORIC PLACES IN 1980 AND CLINGS TO THE CLIFF 150 FEET ABOVE THE RIVER.

ENVIRONMENTAL CONSEQUENCES--CURRENT MANAGEMENT ALTERNATIVE

CURRENT MANAGEMENT ALTERNATIVE--INTRODUCTION

This alternative reflects BLM's present management direction and policies and land use plan decisions. It was assumed that no major policy or funding changes would take place.

Energy and Minerals

Impacts affecting energy and minerals in the Current Management Alternative are from wildlife, recreation, cultural resources, and lands.

The no leasing and no-surface occupancy stipulations in effect for the Perins Peak and Paradox peregrine falcon eyries decrease oil and gas leasing development and production on 1,480 acres. This will be a long-term impact on approximately 0.2 percent of the lands available for oil and gas leasing in the planning area.

The no-surface occupancy stipulation in effect for the Dolores River SRMA has decreased the area in which oil and gas exploration, development and production can be accomplished by 34,680 acres. The majority of this acreage is unavailable because of steep terrain and high construction costs and represents approximately 2.7 percent of the planning area.

No leasing and no-surface occupancy stipulations for cultural withdrawal areas have decreased available acreage for oil and gas leasing, exploration, development and production by 7,200 acres. This acreage represents approximately 0.6 percent of the planning area.

No mineral entry on cultural withdrawal areas has decreased available acreage for mining claim location, exploration and development by 4,360 acres, representing approximately 0.3 percent of the planning area. Impacts to sand and gravel development are similar to those impacts listed under the Resource Conservation Alternative.

Disposing of public lands (and reserving minerals to the Federal government) will result in 16,000 additional acres of split estate management, adding approximately 5.4 percent more lands on which the split estate situation must be dealt with.

Summary

The acreages involved in the Current Management Alternative are per existing MFPs, oil and gas umbrella EAs, withdrawals, and mandates in the case of land disposal. Acreage percentages involved in these categories are relatively small compared to the total planning area. Impacts are considered to be relatively insignificant.

Vegetation

Short-term impacts to vegetation would be a continuation of present trend; many of these changes are subtle and difficult to assess. However, there would probably be some undesirable changes in vegetation due to continued present grazing use levels.

Figure 3-3 illustrates the expected long-term changes in vegetation conditions. Over the long term, these conditions would remain static on sites within the planning area currently under intensive grazing management (11 existing AMPs; 304,000 acres).

ENVIRONMENTAL CONSEQUENCES--CURRENT MANAGEMENT ALTERNATIVE

Possibly significant impacts to vegetation would continue to occur on various sites throughout the remaining 633,000 acres currently being grazed by livestock and wildlife--impacts include a decline in vegetation densities, productivity, vigor, reproduction, and available forage. Declines in vegetation condition, especially in areas of significant competition for available forage between livestock and wildlife, are anticipated but unquantifiable. Preferred forage species in the Spring Creek wild horse herd area (approx. 20,000 acres) would continue to be overutilized by grazing animals and, with increased grazing pressure, would experience locally significant decreases in vegetation densities, vigor, reproduction, productivity, and available forage.

While additional forage for livestock and wildlife may be produced as a result of timber and woodland harvesting, it would not have a significant long-term impact on the total vegetation resource and use by grazing animals.

Existing limited fire suppression plans would affect vegetation resources in the long term by allowing more pinyon-juniper woodland and sagebrush acreage to burn naturally and be replaced with herbaceous vegetation.

Existing ORV restrictions would have both short- and long-term positive impacts to vegetation.

Increases in wild horse populations could have adverse impacts to vegetation in both the short and long term.

Summary

Current vegetation trends would continue in the short term. The overall type and productivity of forage species produced on public lands could decline over portions of the planning area in the long term. No irreversible or irretrievable commitments of vegetation are projected under this alternative.

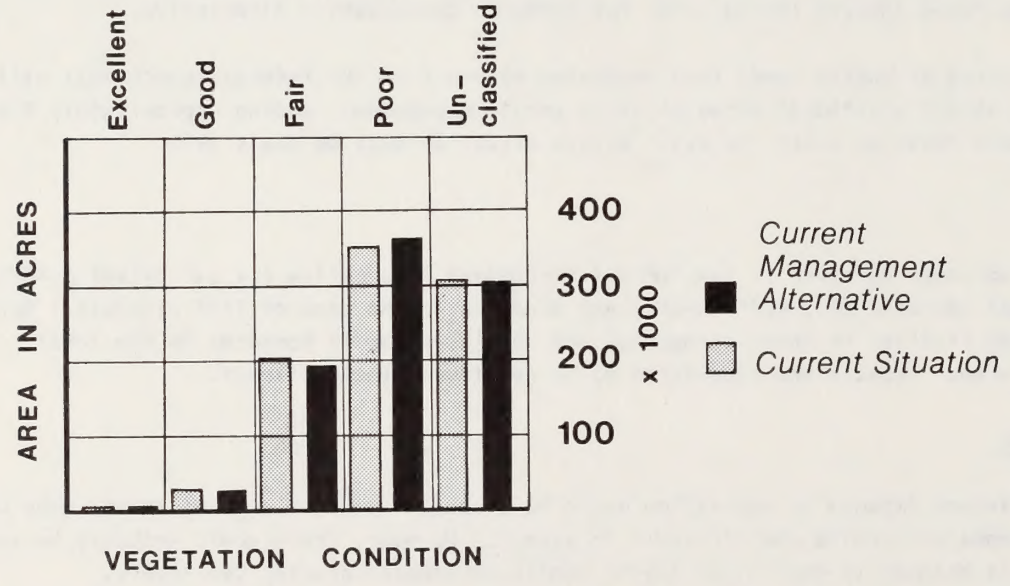

Figure 3-3. Long-term changes in vegetation condition under the Current Management Alternative.

Soils and Water

A continuation of the present livestock grazing practices throughout the planning area along with the heavy big game concentrations in Dry Creek Basin and Disappointment Valley would result in significant impacts to soils and water resources. Continued highly accelerated erosion rates and loss of soil productivity would occur. Accelerated sediment and salinity yields can be expected at approximately their present rates, resulting in off-site water quality impacts.

Roads associated with timber harvests, even properly placed and constructed, would result in short-term increases in erosion rates and sediment yields. The degree of these impacts will vary with the size of the timber harvests.

Continued protection of the Boulder Gulch watershed near Silverton, Colorado, and the ground-water aquifers associated with the Dry Creek Basin and Uravan domestic and municipal wells are necessary to protect the water quality.

Summary

Implementing the Current Management Alternative would result in highly accelerated erosion rates and sediment yields. Salt loading to the Colorado River from public land in the RMP area would continue at its present rate. There would be continued protection for domestic and municipal water sources.

Terrestrial Wildlife

Impacts of this alternative to the wildlife habitat are similar to those listed under the Resource Conservation Alternative, except that range and habitat condition could be expected to remain static or decrease in the long term. Reductions to elk and deer herds in the Disappointment Basin area (890 elk and 1,100 deer) would probably occur in the short and long term. Riparian habitat could not be expected to make substantial improvement since existing AMPs do not address riparian management objectives.

As many as 5,400 acres would be treated under the wildlife program with minimal impacts to nongame species habitat. No investments would be made in structural riparian improvements. Water development would not occur because of limited funding.

Recovery and reestablishing peregrine falcons would be aided by continued releases. Most bald eagle winter concentration areas would be protectively managed with seasonal oil and gas stipulations, but some conflict may remain in other areas. Other T&E species would be protected and managed consistent with existing laws and regulations. Sensitive and nongame species habitat would continue to deteriorate overall with decreasing range and riparian habitat condition.

Lands disposal would eliminate 1.6 percent of available wildlife habitat and approximately one-half mile of riparian habitat. Approximately 1,320 acres of big game crucial winter range would be lost. Big game migration routes between Durango and Bayfield would be negatively affected by disposing of 160 acres in conjunction with private land development. Oil and gas leasing restrictive stipulations would protect most of the deer and elk crucial winter ranges. Other crucial winter range areas are not protected, and conflict may exist with State and Federal wildlife law enforcement agencies over wildlife harrassment.

Weber and Menefee mountain WSAs would remain undeveloped as primitive areas, which would protect presently undisturbed wildlife habitat.

Summary

Terrestrial wildlife habitat would generally remain static or decline under this alternative. Big game populations would decline over the long term. Managing peregrine falcons, bald eagles, and T&E species would continue. Land disposal could have impacts to big game winter ranges, riparian habitat, and big game populations. Increases in wild horse populations will continue vegetation deterioration in these areas.

Aquatic and Riparian Wildlife

Potential for continued deterioration of those streams listed in Chapter Two exists, as well as an anticipated decline in habitat quality for those streams where no inventory data currently exist (approx. 275 mi).

The impacts of management activities pertaining to aquatic wildlife are unquantifiable at this time. Based on the current funding situation, there most likely will be a continued trend toward the habitat condition reflected in Chapter Two. Impacts to the remaining 275 miles of stream habitat are unquantifiable without further inventories and(or) monitoring.

Some short-term, minimal impacts may result from constructing recreation facilities, but no significant long-term adverse impacts are anticipated.

Impacts as a result of mineral development may only be assessed through further monitoring and developing operational plans. It is anticipated that where mineral activities are closely associated with aquatic and riparian habitat, the impacts should be, by regulatory standards, mitigatable and therefore minimal and assessed on case-by-case bases.

Significant impacts are not anticipated, since public land parcels containing potentially high value fisheries will retain public access. Quantifiable impacts will be assessed on case-by-case bases.

Summary

There will continue to be significant, adverse impacts to the aquatic and riparian resources. Those impacts associated with livestock grazing and aquatic wildlife management programs are due primarily to: (1) the continuation of the current situation within the range activity with a lack of effective AMPs causing a continued deterioration of those streams listed in Chapter Two; (2) the lack of any planned aquatic and riparian habitat improvements on approximately 140 inventoried stream miles; and (3) an inability to further inventory and(or) monitor the remaining 260 miles of aquatic and riparian habitat to determine habitat quality. No significant impacts are anticipated from recreation, wilderness, cultural resources, forestry and land disposal activities. However, mineral development may have long-term, significant impacts depending on where they are located and what types of mitigation can be included in mining operation plans. These impacts (from mineral development) are presently unquantifiable and can only be assessed on case-by-case bases, which may require additional monitoring.

ENVIRONMENTAL CONSEQUENCES--CURRENT MANAGEMENT ALTERNATIVE

Livestock Grazing

Under this alternative, no short- or long-term adjustments in AUMs are projected. Applications for nonuse, temporary nonrenewable use, and changes in season, class, or kind of livestock would be accepted and approved or disapproved on case-by-case bases. This alternative proposes no short-term changes in present management practices and has negligible impacts to livestock grazing.

Increases in wild horse populations could have significant adverse impacts on livestock grazing in both the short term and long term. Increased horse use will have significant, adverse effects on management objectives in the Dry Creek Basin, Disappointment Valley and Naturita Ridge AMPs.

Summary

This alternative proposes no short-term or long-term adjustments in grazing preference. Livestock operators would realize no significant short- or long-term changes in grazing management or livestock production.

Wild Horses

Wild horse populations would increase on both the Spring Creek and Naturita Ridge areas. At the present reproduction rates, the populations could double in the short term. In both areas, potential competition for available forage will increase between wild horses, livestock, and big game as horse numbers increase. The overutilization of preferred forage plants is expected to occur in some degree in the short term and could become locally significant in the long term, especially in the Spring Creek area. Adjacent and intermingled private lands and State lands could be adversely affected in both the short and long term.

Spring Creek Area: In the short term, a noticeable change would probably be evident in the appearance and physical condition of the horses due to diet deficiencies. The horses would probably begin to expand their present range in search of adequate forage. In the long term, diet deficiencies would cause the reproduction rate to drop. The susceptibility to disease and death losses could result in herd reductions.

Without selective culling of the horses, chosen inbreeding would probably result, which would increase the probability of generating defective traits and producing inferior horses.

Naturita Ridge Area: In the long term, potential competition for forage between all grazing animals could result in conditions and situations similar to (but to a lesser degree) than those previously discussed in the Spring Creek area.

Summary

Wild horse populations could increase by 100 percent on both areas in 10 years. Adverse impacts would begin to become evident in the Spring Creek area in both the short term and would intensify in the long term. The Naturita Ridge area probably would be more stable in the short term but would have potential conflicts similar to (but of a lesser magnitude than) the Spring Creek area.

In both herd areas, adjacent and intermingled private and State lands could be adversely affected by horses in both the short and long term.

Forestry

Wildlife vegetation treatments will eradicate 2,000 acres of pinyon-juniper, which represents a potential production loss of 60 cords per year; by itself it is not significant.

Areas with special recreation values are withdrawn from timber and woodland production; including Silverton, the Dolores River, and Menefee and Weber Mountain areas. Wood fiber production loss as a result of these withdrawals is approximately 118 MBF each year. When looking at the total timber and woodland production for the region, a yearly loss of 118 MBF is insignificant.

Road and pad construction as a result of mineral activities can have beneficial and adverse impacts. The loss of production and improved access are so minimal that the impacts are not significant.

Land disposal actions could reduce the commercial timber base by 2 percent and result in an insignificant production loss of 11 MBF per year.

Placing commercial forest under intensive management should result in future yields that are double the existing unmanaged stand yields. Timber yield increases associated with the small BLM timber base are insignificant when compared with total timber production for this region.

Summary

Total timber production loss associated with existing and proposed management actions could be 159 MBF per year (318 cords/yr). When compared with the expected yearly demand of 35 MMBF and anticipated timber production by private, State and other Federal agencies, this loss is insignificant.

Recreation

Livestock grazing, mineral development, land disposal, and forestry impacts would be similar to those listed under the Resource Conservation Alternative. Wildlife management impacts would be similar to those listed under the Resource Conservation Alternative except with negligible results. Under this alternative, bighorn sheep and river otters would not be introduced and aquatic improvements would be limited.

Summary

Protecting and enhancing recreation resources by management and development restrictions would have long-term positive impacts to recreation and overall would continue to provide the settings and opportunities most desired by the public and consistent with BLM's management objectives. The lack of wilderness designations would continue to affect the need for those recreation settings and ecotypes that are atypical of the NWPS.

ENVIRONMENTAL CONSEQUENCES--CURRENT MANAGEMENT ALTERNATIVE

Cultural Resources

If access is allowed into remote areas, damage to a large number of cultural sites from commercial pothunting will continue. Impacts will be especially significant in the Bull, Squaw/Papoose, Cahone, Cross, and Dolores River canyons and Tabeguache Creek areas. Increases in patrol and inventory will be needed to offset this potential damage, because impacts are expected as access increases.

Most sites will be avoided by stipulations to livestock improvement projects. However, due to low supervision levels on Category "C" allotments, use may result in site damage and information loss to 1 to 2 sites per year. These impacts will depend on the significance of the particular site and could result in litigation regarding fines for trespassing and costly site mitigation. Maintaining 7,900 acres of vegetation treatments may result in permanent damage to 500 archaeologic and historic sites. Avoidance measures will be used via stipulations to all projects but inadvertent damage may occur. The methods of treatment will vary, bringing about zero to moderate impacts. A strong data base and close supervision during these treatments, especially chaining maintenance, will be necessary to avoid significant impacts.

Livestock grazing may do permanent damage to 40 or more cultural sites--trampling by repeated and concentrated livestock use does affect the cultural site surface material and information losses result. However, in most cases, these are not significant impacts; fencing some sites or redistributing livestock may be necessary to protect affected sites.

A net beneficial impact will result from the educational aspects and visibility of the Anasazi Heritage Center. Impacts to cultural resources could occur if budgeting were low and funds were taken away from on-the-ground resource protection and use for management of the Anasazi Heritage Center.

Current management at approximately 84 identified sites at Lowry and Escalante-Dominguez ruins, Cannonball Mesa, McLean Basin Towers, Hanging Flume, and Sand Canyon is not maintaining their needs. There is a high probability that long-term significant damage will continue; thus, more concentrated management is needed to avoid and mitigate impacts to these sites from visitation and natural forces. There have been positive, short-term impacts to these sites from fencing, recreation maintenance, stabilization, and monitoring.

Managing 45,000 acres in the Silverton SRMA will have the same impacts as those listed under the Resource Conservation Alternative. Cooperative CRMPs should be developed to channel visitors and provide for site protection and visitor safety. No significant impacts are expected from SRMA management for the Silverton area. Road closures will have more significant positive effects on site protection.

Visitor management and control on the Dolores River SRMA will channel visitors away from fragile sites which will likely have a long-term benefit on approximately 40 archaeologic and historic sites. Implementation of the Recreation Area Management Plan will provide visitors with a cultural resources education by their viewing the unique cultural values along the Dolores River corridor. Vandalism may be reduced by developing CRMPs for sites attracting recreation users.

Current levels of recreation management on Weber and Menefee mountain areas have no significant impacts to approximately 10 sites located there. Some visitor interpretation and protection may be needed for these two areas if they are managed as primitive areas.

ENVIRONMENTAL CONSEQUENCES--CURRENT MANAGEMENT ALTERNATIVE

Disposing of 16,000 acres of public lands will have no significant impacts to archaeologic, sacred, or historic sites there. Class III (intensive) inventories will be done on all parcels identified and, if significant cultural values are found, these lands will no longer be considered suitable for land exchange or sale.

Lack of soils and water management will permanently affect approximately 25 archaeologic and historic sites. A lack of erosion control results in the loss of all or portions of these sites, a significant impact.

Habitat improvements via plowing, burning, seeding, and some oak crushing on 5,400 acres may have permanent effects on approximately 93 archaeologic and historic sites. These habitat improvements are proposed in low site density areas, however, and all surface-disturbing treatments will be inventoried and impacts avoided or mitigated. With large land treatments, however, some inadvertent damage may occur. These impacts could be significant unless closely monitoring the project and an adequate amount of inventory data are collected.

With 1,980 acres per decade of commercial and noncommercial forest sales, there is a moderate likelihood that approximately 22 sites will suffer some form of permanent damage. This will not be significant if adequate inventory data are accumulated to provide for their avoidance and possibly mitigation and if close supervision of the timber sales is undertaken. In some cases, inadvertent impacts will likely occur where increases in access will bring vandals to the sites. These impacts are not expected to be high for the acreages proposed because they lie in low site density areas.

A high probability of permanent damage to approximately 2,700 sites due to noncommercial sales estimated at 1,000 cords per year will occur. Damage to cultural values from unsupervised on-demand woodcutting is not known due to a lack of inventory data. Significant impacts are likely occurring due to the concentration of the noncommercial activities in high site density areas west of Cortez and the Disappointment Valley. Many of the areas are not inventoried due to low personnel levels and stipulations which are not monitored for compliance. Current sand and gravel operations may have permanent impacts to approximately 20 archaeologic and historic sites, which may be inadvertently damaged due to gravel operations increasing their visibility. Vandalism may occur in high site density areas. Impacts will be lessened by increased supervision and monitoring all operations. Impacts from DOE lease tracts and hard rock mining would be similar to those listed under the Resource Conservation Alternative.

Summary

The Current Management Alternative will have adverse impacts to cultural sites due to the lack of sufficient positive action to discourage vandalism and site erosion. Increases in access will accelerate these impacts, especially in areas which were protected by limited access and rough terrain. A generally low level of monitoring, planning, and cultural inventory will also have negative impacts to cultural values. The Anasazi Heritage Center, the Recreation Area Management Plan in the Silverton area, and visitor management on the Dolores River will have a net benefit to cultural sites in promoting public support and channeling visitor impacts away from sites. Project developments for livestock grazing, wildlife, and forestry will have impacts to sites which will vary according to involved areas. Levels of monitoring will be inversely related to levels of impacts.

ENVIRONMENTAL CONSEQUENCES--CURRENT MANAGEMENT ALTERNATIVE

Visual Resources

Previous land use plans did not consider management direction for visual resources. Some impacts could occur; however, each project is currently reviewed to consider impacts to visual resources and mitigation as needed; therefore, significant impacts are forecast.

Wilderness

The continued and increased use of motorized vehicles could create damage to natural values and losses of wilderness values.

Forest products would be allowed to be gathered in all WSAs except in the Weber and Menefee mountain WSAs according to current planning direction. Continued cutting would have both short- and possibly long-term impacts to the natural landscape and would result in losses of wilderness values.

The development of minerals (both locatable and leasable) could possibly affect natural landscapes, resulting in losses of wilderness values. If this happened, the natural landscape would be changed, causing long-term impacts which could be considered irreversible and irretrievable losses of the wilderness resource. This impact would be most significant in Cross, Cahone, and Squaw/Papoose canyons, and to a lesser extent, in the Weber and Menefee mountain WSAs due to their moderate to high potential for mineral development. It is assumed that all those reserves listed in the Resource Conservation Alternative could be developed under Current Management (see Table 3-1).

Issuing ROWs for powerlines, roads, etc. could exclude areas from being considered for wilderness status at a later date, which also would be long-term commitments of resources that could be irreversible and irretrievable impacts to wilderness resources.

Summary

The Current Management Alternative of the eight WSAs has a moderate to high potential to degrade wilderness values, since future wilderness would not be designated. The largest potential for this impact to occur exists in the minerals program. Oil and gas, CO_2, coal, and uranium are potentially found in many of the WSAs. Developing these minerals would destroy wilderness values, which would be irreversible and irretrievable losses of the wilderness resources. Under this alternative, there would be no significant impacts to lands and fire.

Economics

BLM investments of $400,000 over a ten-year period with continued management emphasis on tourism and oil and gas exploration and production would occur under this alternative. These levels of investments and management emphasis would result in annual gains of approximately $8 million in 1994 and $8.5 million in 2000 in increased total personal income within the planning area.

Approximately $400,000 in investments are expected to be spent on range improvements and wildlife habitat projects, resulting in moderate decreases in wildlife habitat and with resultant losses of hunting revenue in the planning area.

ENVIRONMENTAL CONSEQUENCES--CURRENT MANAGEMENT ALTERNATIVE

Cultural and recreation resources of the area would be made available for increased tourism, and mineral resources would be available for continued oil and gas exploration and development. An increase in tourist expenditures of $5 million and an increase of oil and gas production values of $3.8 million are expected annually by 1994.

Table 3-6 compares the economic effects of the Current Management Alternative to the baseline projections for 1994 and 2000 and illustrates expected changes in population, employment, per capita income, and total personal income brought about by projected hunting, grazing, fishing, tourism, and oil and gas levels. BLM management of public lands is shown in Table 3-6 to cause less than a one percent change in any economic indicator when viewing the entire planning area. No significant impacts are projected within any economic sector of the individual counties within the planning area. Social changes are expected to be inconsequential given minimal economic changes.

Summary

The Current Management Alternative projects BLM investments of $400,000 with continued management emphasis on tourism and oil and gas exploration and development. No significant impacts are projected within any economic sector of the planning area.

Table 3-6. Economic Impacts Under the Current Management Alternative.

Income sources	Population		Employment		Per capita (income 1983 dollars)		Total personal income - (thousands of 1983 dollars)	
Year	1994	2000	1994	2000	1994	2000	1994	2000
Hunting	-20	-25	-10	-10	0	0	-176	-202
Grazing	4	4	1	1	0	0	9	10
Fishing	0	0	0	0	0	0	0	0
Tourism	572	637	263	271	-7	-8	5,115	5,545
Oil & Gas	249	253	111	112	5	5	3,162	3,248
Subtotal	805	869	365	374	-2	-3	8,110	8,601
Baseline	107,913	121,768	53,178	59,657	10,339	10,245	1,115,744	1,247,538
Total	108,718	122,637	53,543	60,031	10,337	10,242	1,123,854	1,256,139
Percent Change	0.8	0.7	0.7	0.6	0	0	0.7	0.7

Note: See Appendix 8 for methodology.
Source: BLM Data 1984.

ENVIRONMENTAL CONSEQUENCES--PROPOSED PLAN

PROPOSED PLAN--INTRODUCTION

This alternative protects important and sensitive environmental values while balancing competing demands by providing needed goods and services.

Energy and Minerals

The wildlife and cultural resource impacts pertaining to oil and gas leasing and to cultural withdrawals in this alternative are the same as those listed under the Resource Conservation Alternative.

No surface occupancy for oil and gas leasing imposed on Menefee and Weber mountain for management as semiprimitive recreation areas would result in a loss of 8,720 acres that could be occupied for oil and gas exploration, development, and production, representing less than one percent of the planning area. This could result in a potential loss of oil and gas resources. Under current technology, directional drilling methods may not be successful in exploring and producing the Dakota geologic formation resources due to the limitation on depth of the known producing zones (1,330 ft to 1,380 ft). However, deeper producing zones may very well be reached and produced through directional drilling methods. Impacts would be for the long term.

No leasing in the Dolores River Canyon WSA (designated wilderness) would result in a decrease of 28,539 acres (approx. 2% of the planning area) available for oil and gas leasing, exploration, development, and production. This could result in a potential loss of approximately 4.2 billion cubic feet of gas reserves. Impacts would be for the long term. Withdrawal would also affect locatable minerals as described under the Resource Conservation Alternative.

No surface occupancy for oil and gas imposed on the Cross, Cahone, and Squaw/Papoose canyons for management of cultural resources would result in approximately 23,400 acres that cannot be occupied for oil and gas exploration, development, and production. These areas are indicated as having high favorability for oil and gas resources (see Table 3-7 for estimated reserves).

It was proposed that no-surface occupancy stipulations for oil and gas leasing for these areas were suitable because directional drilling methods would allow exploration and subsequent production without destroying the integrity of the cultural resources found in the canyons. Consultation indicates that a 0.25-mile horizontal offset would be the usual for a 12,000-foot to 14,000-foot well. However, Forest Oil Company drilled a directional well near the Squaw/Papoose Canyon WSA of 6,293 feet (true depth) at an average deviation angle of 17°. Horizontal offset was approximately 0.25 mile, accomplished with the drill rig set up on the canyon rim with 500 feet of surface casing. Setting back from the rim and(or) needing more surface casing would have increased the deviation angle and(or) would have caused it to be short of the target. Drilling near canyon rims runs the risk of losing mud circulation in the hole before reaching the depth of the canyon bottom. Directionally drilled holes are also unstable and could easily collapse before drilling is completed. Directional drilling does not appear to be a complete solution to the problem; in addition, production becomes a problem--equipment suffers excessive wear and thus increases maintenance costs. Also, because of these increased costs, life of the wells would be reduced and would not accomplish maximum recovery of the resource.

Table 3-7.
Estimated Oil & Gas & CO_2 Reserves for Cultural Emphasis Areas.

Cultural emphasis areas	Oil (barrels)	Gas (mcf)
Cahone Canyon*	369,000	738,000
Cross Canyon	371,000	743,000
Squaw/Papoose Canyon	206,000	412,000
Total	946,000	1,892,000

Source: BLM Data 1984.
Note: Colorado only. Estimates are 11% (wildcat ratio) of the reserves calculated from data from nearby producing fields as decribed under the Resource Conservation Alternative.
* Cahone Canyon may also contain 46,118 mmcf of CO_2.

Assuming a large number of directionally drilled production wells around the three canyon boundaries, these wells would never be able to entirely drain the reservoirs that may exist in the area, using current technology and well spacing patterns. Maximum drainage distance for an oil well is 0.25-mile radius from the well; for a gas well, a 3,732-foot radius. The opinions arrived at from consultations are that the three canyons could not be fully explored or produced strictly by directional drilling methods. A professional estimate, based on current technology for directional drilling, is that 75 to 80 percent of the reserves shown in Table 3-7 could be recovered. However, advances in technology by industry may result in better recovery techniques that would reduce this loss. The majority of resource losses would be in Cross Canyon, with a minor amount in Squaw/Papoose Canyon due to the width of the canyon (rim-to-rim).

All three canyons are within or adjacent to the Sand Canyon KGS and the McElmo and Cow Canyon unitized areas. Communitized areas exist between Squaw/Papoose and Cahone canyons and are approximately two miles north of the northern boundary of the Cross Canyon area (B. Kershaw, personal commun. 1984).

In addition to the 880 acres of current sand and gravel permits, 400 acres would be available on Ewing Mesa to provide for future demand of these resources. Although this is an 800-acre reduction from the Resource Utilization Alternative, this acreage should be adequate for future demand in the Durango area.

Disposing of public lands (while reserving the minerals to the Federal government) will result in 21,800 additional acres of split estate management, which will add approximately 7.3 percent more split estate lands.

ORV closures associated with the cultural resources, recreation, and wildlife programs will require mining claimants to file a Plan of Operations under 43 CFR 3809 instead of a Notice of Intent.

ENVIRONMENTAL CONSEQUENCES--PROPOSED PLAN

This alternative would have approximately 34,000 acres (3%) of minerals withdrawn. The removal of the proposed mineral withdrawal on the McElmo Research Natural Area (400 acres) should be a positive impact to the minerals program.

Federal coal for exploration and development would be available on 1,480 acres in the Nucla KRCRA (26.6 million tons) and 46,000 acres (1.5 billion tons) in the Durango KRCRA. The East Cortez KRCRA would not be available for possible future coal leasing (a loss of approx. 30 million tons).

No significant impacts from the ACEC designation are expected to the minerals program.

Summary

The greatest impacts to minerals under the Proposed Plan are the no-surface occupancy restrictions in the Cross, Cahone, and Squaw/Papoose canyons and Menefee and Weber mountain areas. All information indicates a high potential for oil and gas reserves in these areas with limited possibilities, given current technology, of fully exploring or producing those reserves that have no-surface occupancy restrictions imposed. Directional drilling does not appear to be the complete solution in the Cross, Cahone, and Squaw/Papoose canyons and is not a viable alternative for the present producing zones in or near Menefee and Weber mountains. This alternative could result in losses of approximately 5.7 million barrels of oil, 3.9 million cubic feet of gas, and 46 billion cubic feet of CO_2.

The designation of the Dolores River Canyon WSA as wilderness would cause a possible loss of 4.2 billion cubic feet of gas and some locatable minerals (gold, silver, uranium and vanadium).

The production and use of coal, oil and gas, and other minerals are irreversible commitments of natural resources. To the extent they are developed in this alternative, there will be irreversible and irretrievable commitments of resources.

Vegetation

Impacts to vegetation would be similar to those listed under the Resource Conservation Alternative, except that more sites would be converted from poor to fair condition and from fair to good condition. Figure 3-4 projects the expected changes in vegetation condition in the long term (unclassified vegetation conditions are presently unknown, but changes will probably occur over the term of the plan).

Range improvements and treatments proposed would be needed to implement management actions and would have positive impacts to vegetation. Many of the projected improvements would lead to improved livestock distribution and the production of better quality and quantity of livestock forage and would have beneficial effects on livestock production. Additional forage may be produced as a result of timber and woodland harvesting.

Vegetation, especially any T&E species, would be protected by designating the Dolores River Canyon WSA as wilderness.

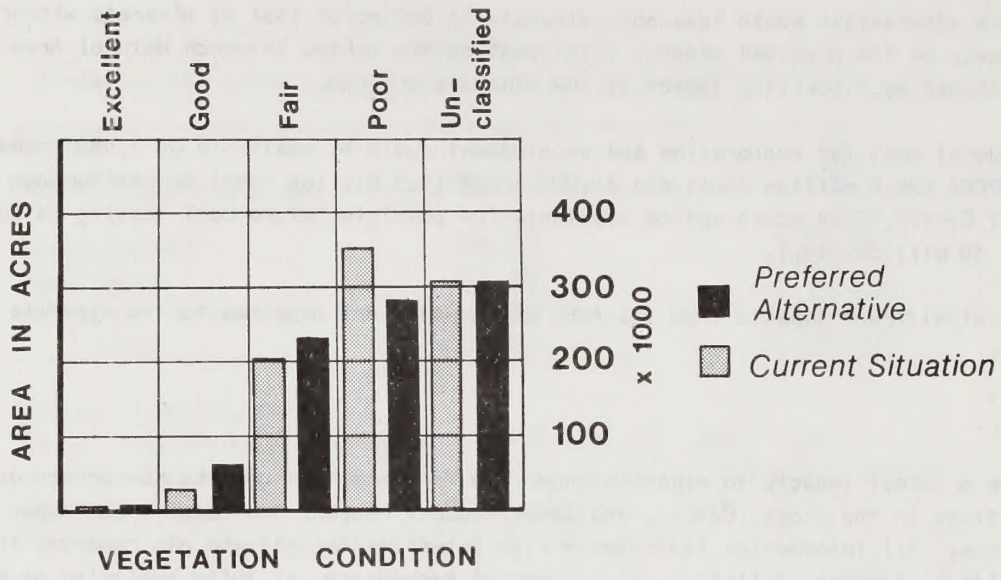

Figure 3-4. Long-term changes in vegetation condition under the Preferred Alternative.

Summary

In the long term, the overall types and productivity of forage species produced on public lands would improve under this alternative.

Properly placing and designing improvement projects could lessen some of the possibly adverse impacts to vegetation.

Soils and Water

Impacts would be similar to those listed under the Resource Conservation Alternative, except that only the Dolores River Canyon WSA would be recommended for wilderness.

Summary

Implementing the Proposed Plan would result in significant decreases in erosion, sediment, and salinity yields and would provide protection to domestic and municipal water sources.

Terrestrial Wildlife

Impacts due to livestock grazing and oil and gas leasing are similar to those described under the Resource Conservation Alternative.

Range and habitat condition could be expected to improve on 810,000 acres. As many as 9,040 acres would be treated under wildlife program funding. Approximately 12.4 miles of riparian habitat would be improved with instream structures and fencing. Water development would improve 11,200 acres of habitat.

Lands disposal would eliminate 2.1 percent of existing wildlife habitat and 8 miles of riparian habitat. Crucial big game winter range losses (600 ac) may be locally significant due to cumulative impacts primarily caused by private land development. Long-term impacts to big game migration routes between Durango and Bayfield are also due primarily to private land development. Disposing of 560 acres in those areas will accentuate the problem.

Coal leasing would not significantly affect wildlife populations. Sand and gravel mining could have locally significant cumulative impacts on deer and elk herds east of Durango in conjunction with private land development and private coal.

Designating the Dolores River Canyon WSA as wilderness would protect undeveloped wildlife habitat and would not significantly affect implementing the wildlife program. Nondesignation for the other WSAs could result in road development and habitat loss associated with locatable mining activities.

Wildlife habitat should benefit from the designation of the ACEC due to more intensive management.

Summary

Terrestrial wildlife habitat conditions should improve over the majority of the planning area due to more intensive management of wildlife habitat, livestock grazing, soils and water, and vegetation. River otters, bighorn sheep, bald eagles and peregrine falcons should benefit from management protection. Land disposal could cause losses of riparian values and winter ranges.

Aquatic and Riparian Wildlife

As previ usly noted in the Resource Conservation Alternative, the development of AMPs will greatly benefit the aquatic and riparian habitat resource. However, present downward trends are expected to significantly affect approximately 94 miles of aquatic habitat and will have unquantifiable impacts to an additional 306 miles of stream habitat. When AMPs are implemented, habitat conditions are expected to improve for reasons similar to those given under the Resource Conservation Alternative.

It is anticipated that wildlife management activities will have significant, positive impacts to 94 miles of aquatic and riparian habitat. However, without further monitoring of the remaining 306 miles of stream habitat, impacts cannot be quantified. Unless activity plans and specific habitat improvements are developed and implemented, the trend toward deterioration will probably continue, especially on those stream miles where habitat quality is not of a high enough priority to warrant improvement practices. Baseline data collection is critical to incorporate aquatic and riparian objectives into activity plans. These impacts are expected to be both significant and adverse, unless these baseline studies are conducted.

Short-term, localized impacts are expected to be significant from constructing recreation facilities. In addition, some long-term impacts to aquatic and riparian habitat from increased fisherman and visitor use will occur but are presently unquantifiable. Long-term, beneficial impacts are anticipated on those fisheries associated with portions of the San Miguel and Dolores rivers due to expected increases in public and interagency support for habitat improvement and HMP implementation.

ENVIRONMENTAL CONSEQUENCES--PROPOSED PLAN

Soils and water management activities will result in long-term improvements to the aquatic and riparian habitat by decreasing sediment, salinity, and pollution caused by heavy metals.

Summary

It is anticipated that livestock grazing activities will have some adverse impacts in the short term until AMPs have been implemented. As activity plans are completed, there should be long-term, beneficial impacts to at least 94 stream miles. Also, trends on the remaining approximately 306 miles of stream habitat should improve following baseline data collection and incorporating aquatic and riparian objectives into the AMPs. There will be significant beneficial impacts due to wildlife management activities on approximately 94 miles of stream habitat. However, the remaining 306 miles of stream habitat may have significant adverse impacts until inventories and(or) monitoring are completed where areas which need improvement are identified and implemented. Recreation users and soils and water should receive beneficial impacts. No significant impacts are expected from other activities, except mineral development, where impact assessments will be considered on case-by-case bases.

Livestock Grazing

Under this alternative, an initial reduction of 22,461 AUMs is proposed on all allotments, which would result in a decrease of 33 percent of the current active preference. These initial adjustments are needed to help achieve the management actions developed for each allotment in the "I" Category (see Appendix Nine-A in the Draft RMP). Appendix Nine-E displays the recommended changes in AUMs for all allotments (see Draft RMP).

The short-term impacts to livestock grazing are partially mitigated because during the 1980 through 1982 grazing seasons, non-use amounted to 13,881 AUMs. This non-use would be a portion of the initial downward adjustment proposed in this alternative. The impacts would therefore be somewhat mitigated since the net reduction from recent actual use would be approximately 7,580 AUMs. In the long term, 73,601 AUMs would be available for livestock use or an increase of 13 percent of the current active preference. This projected increase of livestock forage is dependent on implementing grazing systems, installing range improvements, and establishing land treatments to increase forage productivity, improve distribution patterns, and convert potentially suitable sites to suitable sites. Table 3-8 summarizes the initial and long-term changes proposed in current active preference.

The impacts to each livestock operator would vary according to how grazing use in the allotment fits into the yearlong ranch operation. Increases or decreases of more than 15 percent of current authorized use would normally be phased in for a five-year period, thus allowing the operator to secure alternative pasture or forage and(or) to reduce herd size. Adverse impacts are projected on meeting AMP objectives on the Dry Creek Basin and Disappointment Valley AMPs due to managing horses in the Spring Creek Basin area to keep their wild and free roaming status.

Wilderness designation of the Dolores River Canyon WSA would have no significant short- or long-term impacts to livestock grazing management.

Designation of the Anasazi Culture Multiple Use Area as an ACEC would benefit livestock management through more intensive management.

Table 3-8.
Changes in Grazing Use Under the Proposed Plan.

Grazing use	Total AUMs	Net change in AUMs	
		AUMs	Percent
Current active preference	64,232	--	--
Initial adjustment	42,771	-22,461	-33
Long-term adjustment	73,601	+9,369	+13

Source: BLM Data 1984.

Summary

Short-term impacts to livestock grazing are partly mitigated by the non-use that has typically occurred; however, there would be losses to livestock operators due to lowered livestock production. In the long term, livestock operators should realize significant increases in livestock production.

Through proper mitigation, most adverse impacts due to reductions to livestock grazing management could be avoided. The removal of the wild horses could have long-term, positive benefits on livestock grazing management.

Wild Horses

Impacts would be similar to those described in the Resource Utilization Alternative.

Forestry

Range maintenance of existing chainings reduces the potential woodland production by eradicating young pinyon-juniper stands. Since this acreage is not part of the woodland base, these actions would have no impacts to the sustained yield harvest level. Chaining mature pinyon-juniper will reduce the sustained yield base. Livestock grazing management will chain 3,050 acres of pinyon-juniper in the next 10 years, which will reduce the woodland base by 7 percent and result in a production loss of 92 cords per year over the long term. Assuming that chaining continues, the woodland base could be reduced over the long term.

Roller chopping of existing chaining for wildlife habitat improvement reduces the potential woodland production. Since this acreage is not part of the woodland base, these actions would have no impacts to the sustained yield harvest level. Burning and crushing stagnated oak stands can eventually result in species and growth more favorable to forestry. The impacts could not be considered significant.

Withdrawals from timber and woodland production include the areas of Silverton, the Dolores River, Lemon Dam and Vallecito Lake, and Menefee and Weber mountain areas. Wood

fiber production losses as a result of these withdrawals are approximately 126 MBF each year. When looking at the total timber and woodland production for the region, the yearly losses of 126 MBF are insignificant.

Although no timber harvesting is allowed in the WSAs, the available forest land will remain in the sustained yield base until the area has been designated as wilderness. No available forest land was identified in the Dolores River Canyon WSA; thus, there would be no impacts to forestry.

Road and pad construction as a result of mineral activities can have both beneficial and adverse impacts. The losses of production and improved access are so minimal that the impacts are not significant.

Land disposal actions could reduce the commercial timber base by 23 percent and result in production losses of 148 MBF per year. The woodland base could be reduced by 11 percent with a production loss of 140 cords per year, not significant impacts.

Placing commercial forest under intensive management should result in future yields that double the existing unmanaged stand yields. Timber yield increases associated with the small BLM timber base are insignificant when compared with total timber production for this region. Placing the woodland species under management is significant because, for the first time, the woodland base is recognized as a legitimate resource and will be managed for a sustained yield of wood fiber.

Summary

Total forest production loss associated with existing and proposed management action could be 390 MBF per year (780 cords/yr). When compared with the expected yearly demand of 35 MMBF and anticipated timber production by private, State and other Federal agencies within the region, this loss is insignificant. Vegetation treatments by range and land disposal actions could reduce the woodland sustained yield base by 18 percent in the next 10 years. Continuing these actions would have substantial impacts over the long term.

Recreation

Livestock grazing, mineral resources, public land disposal, wildlife management and forestry impacts would be the same as those listed under the Resource Conservation Alternative.

Historic motorized use in the Dolores River Canyon WSA could not continue because it would be closed to ORVs. In the long term, opportunities for primitive recreation, controlled through intensive management, are no longer available in existing settings except in the Dolores River Canyon WSA.

Wilderness designation of the Dolores River Canyon WSA as wilderness would have long-term, positive impacts to recreation by continuing to provide primitive recreation experiences in an ecotype not well represented in the NWPS. Nonwilderness designation of the other seven WSAs could adversely affect the primitive recreation experience since mineral development could occur and associated roads and facilities could be constructed.

Impacts to cultural resources and wild horses would be similar to those listed under the Resource Utilization Alternative.

Impacts to soils and water would be similar to those listed under the Resource Conservation Alternative, but with less positive influence on public experiences.

The continued designation of the McElmo RNA would have positive impacts to research occurring in the area. Continuing the present no-surface occupancy stipulations for oil and gas leasing would also have positive impacts.

ACEC designation of the Anasazi Culture Multiple Use Area would have long-term impacts through increased visitor use and resource protection. Designation would provide increased opportunities for public recreation experiences and cultural resources interpretation and research.

Summary

Protecting and enhancing recreation resources by management and development restrictions would have long-term positive impacts to recreation. Wilderness designation of the Dolores River Canyon WSA and ACEC designation would have positive, long-term impacts to recreation opportunities and settings.

Cultural Resources

Managing portions of the Dolores River Canyon WSA as wilderness will have long-term, positive benefits for approximately 40 archaeologic and historic sites. Positive impacts due to access control and vandalism reduction will occur. Some sites will be removed from research but not from interpretation due to the seasonal recreation boating use. Impacts will be beneficial and could be significant. Additional inventory for protection and stabilization could be delayed. Some increases in visitation can be expected, but a management plan will avoid impacts via visitor channeling and interpretation.

Restrictive ORV use and no-surface occupancy stipulations for oil and gas leases on Cross, Cahone and Squaw/Papoose canyons and the Tabeguache Creek area will have a significant beneficial effect on approximately 2,400 archaeologic and historic sites. Nondesignation of these four WSAs could allow increased development activities. The resultant development could heavily affect many sites due to increased vandalism. No significant impacts will result if patrol levels are adequate. There will be no significant impacts to cultural resources due to nondesignation of Weber and Menefee mountains and McKenna Peak WSAs. Long-term impacts will occur to the setting of significant cultural resources not protected by mineral withdrawals in Cross, Cahone, and Squaw/Papoose canyons.

The development of pre-FLPMA oil and gas leases and mining claims in Cross, Cahone, and Squaw/Papoose canyons would have impacts similar to those described under the Resource Utilization Alternative (see p. 3-40).

AMPs will have beneficial impacts to an unknown number of archaeologic and historic sites. Increases in allotment planning via projects, fences, and livestock distribution will reduce impacts to sites from trampling, the primary impact of livestock grazing.

Increases in numbers of livestock will likely have long-term significant effects on an unknown number of archaeologic and historic sites via trampling, especially in the Sacred Mountain area and near water resources. Intensive inventories near water sources

and a strong data base in site areas will lessen impacts through avoidance; if these measures are undertaken, no significant impacts should occur.

Maintaining 18,000 acres of vegetation treatment may have permanent negative effects on approximately 1,100 archaeologic and historic sites. Avoidance measures are assumed; however, inadvertent damage may occur in the Sacred Mountain area where site densities are especially high. A strong inventory base and close monitoring should avoid most of these impacts.

New vegetation treatments to 22,000 acres may permanently affect approximately 1,400 archaeologic and historic sites. Inadvertent damage to sites in high density areas, especially the Sacred Mountain area, may occur. Adequate inventories in these areas and intensively monitoring all projects will reduce these impacts so they are not significant.

Maintaining and installing range improvement projects may have some impacts to an unknown number of archaeologic and historic sites. Any damage would be low and inadvertent. All projects will use avoidance via stipulations. Inadvertent damage will be much less if more supervision and monitoring are done.

Managing Weber and Menefee mountains for recreation values and ORV closure will have long-term, beneficial impacts to approximately 10 archaeologic and historic sites. Some protection to these sites will be afforded via monitoring and management restrictions; thus, no significant impacts will occur.

Managing the Silverton SRMA would be similar to those impacts listed under the Resource Conservation Alternative.

Disposing of 21,800 acres of public lands will have no significant impacts to archaeologic, sacred, or historic sites. Class III (intensive) inventories will generally be done on all parcels identified, and, if significant cultural values are found, these lands will no longer be considered suitable for land exchange or sale, unless they were being transferred to another Federal or State agency that would provide similar protection.

Managing public land for erosion and sediment control may have positive, long-term impacts to approximately 25 archaeologic and historic sites. Erosion control measures may prevent losses of all or portions of these sites, which could be significant if control measures are targeted to cultural resources protection. Additional inventory will be needed to identify locations and needs. There is a low likelihood that inadvertent damage to approximately 200 archaeologic and historic sites may occur if adequate inventories are not completed and monitoring levels are low.

Developing watershed management plans will likely have long-term, positive impacts to an unknown number of archaeologic and historic sites. Through management plans, effects on some sites from erosion can be avoided or mitigated before information losses occur. These impacts are probably not significant for the short term but could be for the long term.

Managing 46,000 acres for salinity control may have permanent impacts to approximately 180 archaeologic and historic sites. These would result from inadvertent activity related to project installation and will be greatly reduced with adequate inventories and close supervision in sensitive areas, all of which are in low site density areas.

Inventory and mitigation of point sources of acid mine drainage in the Silverton area may have negative impacts to an unknown number of historic sites. Since most of these acid sources are mine portals, care will need to be taken to avoid and mitigate impacts to any significant historic sites. If this and construction monitoring are done, no significant impacts will occur.

With 4,710 acres per decade of commercial and noncommercial forest sales, there is a moderate likelihood that approximately 100 archaeologic and historic sites will suffer some form of permanent damage. This will not be significant if adequate inventory data are accumulated to provide for their avoidance (and possibly mitigation) and if close supervision of the timber sales is undertaken. Inadvertent impacts will likely occur in some cases where increases in access will bring vandals to the sites. These impacts are not expected to be high for the proposed acreages, as they lie in low site density areas.

Impacts due to wildlife management activities will be the same as those listed under the Current Management Alternative, except that habitat improvement projects may have permanent effects on 155 archaeologic and historic sites if inventory levels are low and monitoring personnel are unavailable.

Generally impacts from oil and gas and CO_2 operations, DOE lease tracts, and hard rock mining are similar in degree to those discussed in the Resource Conservation Alternative; however, there are slight differences because Cahone, Cross, and Squaw/Papoose canyon areas are not now being withdrawn from mineral entry under the Proposed Plan.

The increasing levels of sand and gravel operations on Ewing Mesa will likely have permanent effects to approximately 25 archaeologic and historic sites. Sites directly affected by gravel operations will be mitigated if not assessed as valuable in place. No significant impacts will occur here. However, inadvertent damage may occur to a few sites because of visibility and increases in accessibility to the public land on the mesa top.

Coal leasing of 1,480 acres near Nucla will affect approximately 60 sites. Since this would be a strip mining operation, data recovery on all sites may be needed. No significant impacts would occur, but data recovery would be costly.

Coal leasing on 46,000 acres in the Durango KRCRA may have permanent negative effects to approximately 280 archaeologic and historic sites. Since most mining here will be underground, impacts will be primarily from increased access to mining activity, bringing increases in visitation and vandalism. Inadvertent losses should be minimal. More attention to avoidance and data recovery should be given to areas with high potential for subsidence and sites near access roads and mine portals. Site-specific inventories will be necessary. Most of this land is private surface and will require coordination with landowners for access to do cultural resources work.

The designation of the Anasazi Culture Multiple Use Area as an ACEC will have a positive impact to cultural resources through more intensive monitoring and supervision of the cultural resources.

Summary

The Proposed Plan will have net beneficial impacts to cultural resources through developing CRMPs and reductions in access. Livestock grazing plans and recreation

management will also have overall benefits to cultural resources. Mineral entry and access into remote areas will increase potential damage to sites from vandalism for the short term. However, long-term impacts to the setting of these sites will be significant if mineral entry is allowed, especially into Cross, Cahone, and Squaw/Papoose canyons. Increases in patrol and monitoring mineral actions will benefit cultural resources in reducing vandalism. The Anasazi Heritage Center will improve cultural resources management through increased awareness, while also providing a focus for cultural resources education.

The designation of the Anasazi Culture Multiple Use Area as an ACEC will have a positive impact to cultural resources through more intensive monitoring and supervision.

Visual Resources

Approximately 30 percent of the important landscape areas within the planning area are not identified for special visual management. Impacts to scenic values could occur from multiple resource development projects that would be allowed with moderate to high visual contrast.

Summary

Other important landscape areas would receive VRM Class I or II management, which would tend to maintain visual resources on 70 percent of the important landscape areas within the planning area.

Wilderness

Wilderness designation for the Dolores River Canyon WSA would have long-term, positive impacts to the wilderness resource, including enhancing natural values and adding to outstanding opportunities for solitude and primitive recreation.

Nonwilderness status for the other seven WSAs would have long-term, adverse impacts to the wilderness resource. Future mineral development and associated roads and facilities could significantly alter the natural landscape and opportunities in the region for solitude and primitive recreation. Pre-FLPMA oil and gas leases and mining claims exist in Cross, Cahone, and Squaw/Papoose canyons and Weber Mountain WSAs. These pre-FLPMA rights could be developed, regardless of management proposed in this and any of the other alternatives, and are, therefore, not impacts specifically associated with this alternative. A moderate probability exists for development of these mineral rights during the term of the plan. Mineral development has a low probability of occurring in the other three WSAs. Nondesignation of the seven WSAs would be a national long-term loss of ecological systems and landforms that are not currently part of or may never be included in the NWPS.

Wildlife viewing opportunities would be enhanced in the Dolores River Canyon WSA by the reintroduction of bighorn sheep and river otters.

A loss of supplemental values associated with the removal of wild horses from the McKenna Peak area would occur.

Implementing intensive grazing management in Cross Canyon and portions of the McKenna Peak WSAs could be long-term, irreversible and irretrievable losses of the wilderness resource.

Harvesting wood products would not be encouraged in the nonsuitable WSAs; however, limited impacts to wilderness values could occur due to removing wood products.

Withdrawing all forms of mineral entry on the Dolores River Canyon WSA will preserve and protect the natural landscapes. However, some pre-FLPMA mining claims or mineral leases could adversely affect the wilderness values in the Dolores River Canyon WSA should they be developed.

The WSAs indicated as nonsuitable (Cross, Cahone, and Squaw/Papoose canyons, Weber and Menefee mountains, McKenna Peak, and Tabeguache Creek WSAs) could all have mineral development that would adversely affect wilderness values, in spite of the no-surface occupancy provisions of the Proposed Plan. Coal and oil and gas potentially are found in association with the Weber and Menefee mountain WSAs. No coal development will be allowed on the Weber and Menefee mountain WSAs, but pre-FLPMA oil and gas leases exist in the Weber Mountain WSA. The Cross, Cahone, and Squaw/Papoose canyon WSAs would be protected in the future from new oil and gas development; however, pre-FLPMA leases exist which, if developed (moderate to high probability), would significantly affect wilderness values. The potential is much less probable (low) for the McKenna Peak, Menefee Mountain, and Tabeguache Creek WSAs to be developed for their mineral potential.

Locatable minerals could also have significant impacts to wilderness values. Pre-FLPMA mining claims exist in significant quantities in Tabeguache Creek, McKenna Peak, and Squaw/Papoose, Dolores River and Cross canyon WSAs. The potential for this impact to occur is probably highest in Cross and Squaw/Papoose canyon WSAs. The potential impacts from developing minerals could have significant, long-term irreversible, irretrievable impacts to the wilderness resource. No validity determinations have been performed on any of these mining claims.

Six of the WSAs recommended unsuitable (except McKenna Peak) would receive Class II visual protection concerning construction of ROWs, which does not preclude development but provides high visual protection. Developing the ROWs could still possibly adversely affect wilderness values.

Wilderness values could be degraded if significant projects are undertaken in the McKenna Peak WSA to reduce erosion and salinity.

Summary

The seven WSAs not recommended suitable for wilderness designation have a moderate to high potential for degradation of natural values if not designated wilderness, primarily as a result of mineral development. The potential is high for this impact to occur in Cross, Cahone, and Squaw/Papoose canyons and Weber and Menefee mountain WSAs and portions of the McKenna Peak WSA. The impacts would be losses of solitude, primitive recreation, naturalness, supplemental values, and diversity in the NWPS.

Wilderness values would be enhanced by the wilderness designation of the Dolores River Canyon WSA as opportunities for solitude, primitive recreation, and diversity in the NWPS will be enhanced.

Wilderness opportunities and values have a high probability of being lost in the other WSAs due to mineral, range, and salinity management and could be considered permanent losses of wilderness resources.

Lands

Impacts would be similar to those described under the Resource Conservation Alternative for land disposal, except approximately 2 percent of the public land would be disposed of and(or) consolidated.

Fire

Impacts would be similar to those listed under the Resource Conservation Alternative.

Economics

The Proposed Plan projects BLM investments of $2.3 million over a ten-year period with a moderate degree of management emphasis on all resources. This level of investment and management emphasis would result in annual gains of approximately $13 million in 1994 and $14 million in 2000 in increased total personal income within the planning area.

Improvements in vegetation condition and wildlife habitat would take place with only small increases in wildlife and livestock numbers for either the short or long term. Consequently, no substantial changes in hunting or grazing revenues are projected despite expenditures of $1 million to livestock grazing, $530,000 to wildlife and $450,000 to soils and water projects. Improvements in vegetation condition and wildlife habitat could bring substantial returns.

Revenues from fishing are expected to increase moderately given aquatic and riparian habitat improvements and expenditures of $358,000. Management focus on recreation, tourism, and cultural resources reach their high with additional annual tourist expenditures increasing by $10 million. Oil and gas production may be expected to increase moderately by an annual value of $1.5 million in 1994.

Table 3-9 compares the economic effects of the Proposed Plan to baseline projections for 1994 and 2000 and illustrates expected changes in population, employment, per capita income, and total personal income brought about by projected hunting, grazing, fishing, tourism, and oil and gas levels.

BLM management of public land is shown in Table 3-9 to cause no greater than a 1.2 percent change in any economic indicator when viewing the entire planning area. No significant impacts are projected within any economic sector of the individual counties within the planning area. However, a population increase of more than 500 persons is projected to occur in Montezuma and La Plata counties by 1994 due to increased levels of tourism. Social changes are expected to be inconsequential given minimal economic changes.

Table 3-9. Economic Impacts Under the Proposed Plan.

Income sources	Population		Employment		Per capita income (1983 dollars)		Total personal income - (thousands of 1983 dollars)	
Year	1994	2000	1994	2000	1994	2000	1994	2000
Hunting	0	0	0	0	0	0	0	0
Grazing	14	15	4	4	-1	-1	34	40
Fishing	3	2	77	79	-4	-4	1,268	1,391
Tourism	1,143	1,274	525	542	-14	-16	10,229	11,089
Oil & Gas	100	102	45	45	2	2	1,276	1,311
Subtotal	1,260	1,393	651	670	-17	-19	12,807	13,831
Baseline	107,913	121,768	53,178	59,657	10,339	10,245	1,115,744	1,247,538
Total	109,173	123,161	53,829	60,327	10,322	10,226	1,128,551	1,261,369
Percent change	1.2	1.1	1.2	1.1	0	0	1.1	1.1

Note: See Appendix 8 for methodology.
Source: BLM Data 1984.

SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

This section identifies the trade-offs between short-term use and long-term productivity of the resources involved in the alternatives. For this analysis, short term refers to the period involved for implementing the plan (within approx. 10 years) and long term refers to a 20-year period (unless otherwise noted under a specific resource).

Energy and Minerals

No leasing or withdrawal from mineral entry restrictions proposed by various resources would create long-term, adverse effects on mineral development, which would vary by alternative from 1 percent to 15 percent of the planning area.

Vegetation

For all alternatives in the short term, vegetation would be disturbed on vegetation manipulation areas, timber harvest sites, and mineral development locations. Vegetation disturbance could occur on more acreage under the Resource Utilization Alternative. A significant, long-term increase in vegetation production could occur for the Resource Utilization Alternative and the Proposed Plan. Vegetation cover would reestablish on disturbed areas, and there would be an increase in plant vigor, forest growth and reproductions, seedling establishment, litter accumulation, and overall vegetation improvement.

Soils and Water

In the short term, soil losses would increase slightly from vegetation manipulation, timber harvesting, and mineral development under all the alternatives. The most crucial short-term soil losses would occur under the Resource Utilization Alternative. The least amounts of loss would result under the Current Management Alternative. In the long term (under all alternatives, except for the Current Management Alternative), increased vegetation production and ground cover would significantly reduce soil losses, thus providing long-term net improvements to the soil resources.

In the short term, water quality conditions would decline under all alternatives because of vegetation manipulations and other soil-disturbing activities. The Resource Utilization Alternative proposes the most manipulation projects. In the long term (for all alternatives, except for the Current Management Alternative), water quality improvements would be expected because of water treatment projects and vegetation reestablishment. The Resource Conservation Alternative identifies the most projects that would increase water quality.

Wildlife

Terrestrial. In the short term, big game forage and habitat would decrease because of vegetation manipulation projects. The Resource Utilization Alternative proposes the most acres for manipulation. In the long term, as vegetation for forage and habitat reestablishes, only the Resource Utilization Alternative proposes a significant increase in big game populations.

Aquatic. In the short term, aquatic and riparian habitat could decline in quality, pending improved management actions, would be most noticeable in the Resource Utilization Alternative. All alternatives, except the Current Management Alternative, should improve aquatic and riparian conditions over the long term.

SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

Livestock Grazing

In the short term, initial stocking rates of AUMs would be decreased because of vegetation manipulation projects, most evident in the Resource Conservation Alternative and least evident in the Current Management Alternative. In the long term, as vegetation cover is reestablished, forage productivity would increase, allowing increases in available forage. These increases would not occur in the Current Management Alternative but would occur in the other alternatives, with the greatest increases occurring in the Resource Utilization Alternative.

Wild Horses

Short-term impacts to wild horses would be minimal under all alternatives, except under the Resource Utilization Alternative and Proposed Plan, where the horses would be removed. Long-term impacts would be generally positive under all alternatives except under the Resource Utilization Alternative and Proposed Plan.

Forestry

No significant, short-term impacts would occur under any alternatives. The major long-term impact is increased production due to more intensive management of the forest resource, which would be most notable in the Resource Utilization Alternative and the Proposed Plan.

Recreation

In the short term, recreation activities on public land such as camping, hunting, fishing, and boating would remain constant in all the alternatives. In the long term, however, recreation opportunities could increase in all alternatives. The increases would result through more access, better developed sites, increases in water yield and quality, and better big game habitat resulting in increased game population. The Resource Utilization Alternative proposes the largest increase in visitor use.

Cultural Resources

For all alternatives in the short term, cultural resources could benefit because the increased project work would create cultural inventory needs and land clearances on lands that are affected by the projects. Increases in access brought about by the Resource Utilization Alternative and the Current Management Alternative will have significant, long-term adverse impacts due to increases in vandalism. The areas identified as emphasis areas would benefit in the short term and long term under all alternatives except under the Current Management Alternative. All other long-term effects to cultural resources would be insignificant.

Wilderness

Wilderness designation would provide for both short- and long-term protection for identified wilderness values due to restrictions on development activities. Designating WSAs as wilderness would have long-term positive impacts by preserving ecological systems to benefit future generations.

SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

Nonwilderness designation of the WSAs would have both short- and long-term adverse impacts to the wilderness values by possible future disturbance and degradation.

Economics

In the short term and long term, socioeconomic conditions in the planning area would not be significantly affected by management proposals under any of the alternatives.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This section identifies the extent to which the alternatives would irreversibly limit potential uses of the land and resources. Irreversible and irretrievable commitments of resources occur when a wide range of future options is hindered.

Energy and Minerals

Designating existing WSAs as wilderness would result in irreversible and irretrievable losses of mineral development in those areas. The leasing and mining of coal, oil & gas, CO_2, and uranium and vanadium reserves would result in irreversible and irretrievable losses of the resources that are extracted and the resources that would remain as unrecoverable. Extents of these impacts would vary greatly depending on particular development of the resource.

Soils

Minor soil losses would be irretrievably committed in areas of vegetation manipulation, timber harvesting, and mineral development.

Terrestrial and Aquatic Wildlife

Wildlife habitat lost through land exchanges or sales, long-term energy development, urban expansion, and project implementation would be irretrievably and irreversibly lost.

Cultural Resources

Under the Current Management and Resource Utilization alternatives, access into remote regions of the planning area, especially in the Squaw/Papoose, Cross-Cahone and the Dolores River canyons and the Tabeguache Creek areas will degrade the quality of these areas for the educational and recreation appreciation of their important cultural resources. It will also have permanent, irreversible direct impacts to a large number of sites due to vandalism.

Lands

Public land disposal would result in irreversible and irretrievable losses of administrative control and public uses for all resource values except minerals.

Wilderness

Not designating existing WSAs would result in irreversible and irretrievable losses of wilderness values.

NET ENERGY ANALYSIS

A specific energy analysis was not performed for this RMP/EIS because no major actions affecting specific sites are being proposed. A site-specific energy analysis will be included in the EIS or EA prepared for any major site-specific actions. A meaningful net energy analysis requires that a specific action be analyzed and some preliminary engineering data be available.

CHAPTER FOUR - CONSULTATION AND COORDINATION

AMERICAN MUSEUM
CHARTERS FOR

CHAPTER FOUR

CONSULTATION AND COORDINATION

This RMP was prepared by an interdisciplinary team of resource specialists from BLM's San Juan Resource Area, Montrose District and Colorado State Office. RMP writing began in February 1983 and was preceded by steps which included issue identification, resource inventories, interagency coordination, and public participation. Consultation and coordination with agencies, organizations, and individuals have occurred in a variety of ways throughout the planning process.

Consistency with Other Plans

The BLM planning regulations require that RMPs be "consistent with officially approved or adopted resource-related plans of other Federal agencies, State and local governments, and Indian tribes, so long as the guidance and resource management plans are also consistent with the purposes, policies, and programs of Federal laws and regulations applicable to public land..." Several actions have been taken to ensure this consistency requirement was met. Letters requesting copies of plans or policies concerning the public land have been sent to all counties and Indian tribes that have significant involvement in the RMP area. Montrose County responded with a copy of their land use plan which does not apply to this RMP area. In addition, the major counties were briefed on the resource alternatives in September 1983 to gather input concerning their desires and plans. The Colorado Department of Natural Resources was contacted and briefed on the alternatives in December 1983. The above-mentioned groups, counties, and agencies were given copies of the Draft RMP and were asked for comments.

Hovenweep Plan

The National Park Service is currently developing a management plan considering a variety of alternatives. One of the alternatives being considered is to expand the monument to include public land. The BLM is knowledgeable about this proposed alternative; we have not incorporated this action into our plan because their plan has not been subjected to public review and a final plan has not been developed. If expanding the monument becomes their proposed action, then a plan amendment would likely have to occur on this RMP to incorporate their proposal prior to any action being undertaken.

Cooperating Agency

The San Juan National Forest has requested to be a cooperating agency on the land use plan due to an exchange of land that occurred on October 31, 1983, between the Bureau of Land Management and the U.S. Forest Service. Congress authorized in Public Law 98-141 an exchange of lands located generally in the Lemon Dam and Vallecito Lake areas, Silverton area, and along the Upper Dolores River (see Appendix One in the Draft RMP). The exchange was undertaken to improve management on those public lands.

Because the exchange occurred after the San Juan National Forest Plan was finalized, the BLM land use plan is being used to analyze alternatives and provide guidance on the lands to be managed by the Forest Service. Appendix One in the Draft RMP gives a detailed description of the land use planning guidance for both the tracts of land being transferred from BLM to the U.S. Forest Service and those lands being transferred from the U.S. Forest Service to BLM.

CONSULTATION AND COORDINATION

Anasazi Advisory Committee

Committee's Purpose

The Anasazi Advisory Committee was formed by U.S. Congressman Ray Kogovsek (Third District-Colorado) in late 1981. The committee was selected in response to a government proposal for legislation to create a National Conservation Area (NCA) and consists of southwestern Colorado residents representing diverse interest groups.

The proposal for creating a NCA involved 217,000 acres of public land under BLM's jurisdiction in southwestern Colorado. The proposed area contains significant numbers of archaeological sites, which are cultural remnants of Anasazi habitation that date between A.D. 500 to A.D. 1300. The NCA designation sought to protect and perpetuate a unique cultural resource while ensuring long-term use and development of such other national resource values as oil and gas, CO_2, coal, uranium, grazing, and other uses.

Congressman Kogovsek did not perceive a clear definition of the problem or the need for an NCA; therefore, he established a grassroots committee and charged them to define the causes of the problems and ways to resolve those problems.

The committee finished their tasks in October 1983 and made the following recommendations (a complete committee report is available in BLM's San Juan Resource Area Office):

1. Maintain the multiple use concept administered by BLM.

2. Protect the archaeological and cultural resources from continued erosion through limited access, stronger enforcement, limiting hunting activities and increased BLM patrol and monitoring of the area.

3. Manage all resources through a comprehensive management plan developed specifically for the Sacred Mountain Planning Unit.

4. Develop an integrated network of educational programs coordinated through the Anasazi Heritage Center.

5. Maintain and stabilize archaeological sites.

6. Develop a cooperative program with other government agencies.

7. Establish an advisory board for the Sacred Mountain Planning Unit to insure local input for all multiple use activities.

8. Request that Congressman Kogovsek and his staff monitor closely the planning and the budgeting activities of the BLM in the area.

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Affected Areas

The San Juan-San Miguel RMP contains a highly diverse planning area. The following counties, states, national forests, Indian tribes, national parks and monuments, and BLM resource areas are either contained in the area or are immediately adjacent.

Counties/State

Colorado

Archuleta
Dolores
La Plata
Mesa
Montezuma
Montrose
San Juan
San Miguel

New Mexico

Rio Arriba

Utah

San Juan

National Forests/State

Colorado

Gunnison
Rio Grande
San Juan
Uncompahgre

Utah

Manti-La Sal

National Parks/Monuments (Colorado)

Hovenweep National Monument
Mesa Verde National Park
Yucca House National Monument

Indian Tribes/State

Jicarilla Apache, New Mexico
Navajo, Arizona/New Mexico/Utah
Southern Ute, Colorado
Ute Mountain Ute, Colorado/New Mexico/Utah

BLM Resource Area/Location/State

Colorado

San Luis, Alamosa
Grand Junction, Grand Junction
Gunnison Basin, Gunnison
Uncompahgre Basin, Montrose

New Mexico

Farmington, Farmington
Taos, Taos

Utah

Grand, Moab
San Juan, Monticello

Public Participation

A Federal Register notice was published on January 5, 1980, that announced the formal start of the planning process. A preliminary list of issues was presented to the public in a series of workshops in early 1981; these issues were then refined to nine main issues based upon public input and BLM professional opinion.

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The final list of planning issues and criteria was sent to the public in the June 1983 issue of San Juan Resource Area Bulletin. Three meetings were held in June 1983 to discuss the grazing allotment categorization process with livestock users. A newsletter, with approximately 800 people on the mailing list, has been sent out quarterly since the spring of 1983 to keep the public informed of planning actions. Three public workshops were held in September 1983 to discuss the planning alternatives.

Numerous other coordination meetings, telephone calls, personal contacts, etc. have occurred in developing this RMP. Records of many of these contacts are found in the San Juan Resource Area files.

Distribution

Copies of this document have been sent to the following agencies, businesses, and interested groups for their review and comments:

Federal Agencies

Advisory Council on Historic Preservation

U.S. Department of Agriculture
- Agricultural Stabilization and Conservation Service
- Grand Mesa-Uncompahgre-Gunnison National Forest
- Manti-La Sal National Forest
- San Juan National Forest
- Soil Conservation Service

U.S. Department of Energy

U.S. Environmental Protection Agency

U.S. Department of the Interior
- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Mesa Verde National Park
- U.S. Fish and Wildlife Service

Western Area Power Administration

Counties (Colorado unless otherwise indicated)

- Archuleta
- Dolores
- La Plata
- Mesa
- Montezuma
- Montrose
- Rio Arriba (New Mexico)
- San Juan (Colorado and Utah)
- San Miguel

Universities

- Chadron State College
- Colorado State University

Universities (continued)

Colorado, University of
Fort Lewis College
Illinois, University of
Minnesota, University of
Northwest University-Illinois
Utah, University of
Western State College

Indian Tribes

Jicarilla Apache
Navajo Nation
Southern Ute Tribe
Ute Mountain Ute Tribe

Local Political Organizations

Local and Regional Mayors
Local and Regional Town and City Councils
Montezuma County Energy Impact Coordinator
New Mexico Game and Fish Department
Representatives and Senators (local and regional)
State Clearinghouses (Colorado, New Mexico, and Utah)
State Governors of Colorado, New Mexico, and Utah

Colorado Organizations and Agencies

Association of 4-WD Clubs
Board of Land Commissioners
Colorado State Archaeological Society
Department of Agriculture
Department of Local Affairs
Department of Natural Resources
Department of State Highways
Division of Impact Assistance
Division of Wildlife
Farm Bureau
Historical Societies
Land Use Commission
Mining Association
Mountain Club
Native Plant Society
Natural Areas Program
Natural Heritage Inventory
Office of Energy Conservtion
Open Space Council
River Outfitters

Colorado Organizations and Agencies (continued)

State Historic Preservation Officer
Water Conservation Board
Western Area Council of Governments
Wildlife Federation
Woolgrowers Association

Industry and Organizations

American Mining Congress
American Wilderness Alliance
Amerigas
Amoco Production Company
Anaconda Copper
Anschutz Corporation
Archuleta County Cattlemen's Association
Arco Coal Company
Atlantic Richfield Company
Benham Group
Center for Wild Horse and Burro Research
Centuries Research
Champlin
Chevron Geosciences Company
Club 20
Colorado-Ute Electric Association
Complete Archaeological Services Association
Conservation Library
Consolidation Coal Company
Cotter Corporation
Crow Canyon School
Cugnini Land and Cattle Company
Delta-Montrose AVS
Division of Conservation Archaeology
Durango Helicopters/Powder Guides
Durango Regional Planning Commission
Empire Electric Association, Inc.
Energy Fuels Coal Corporation
Environmental Studies Group
Exxon Minerals Company
Farmers Mutual Telephone Company
Flatirons Surveying
Forest Oil Corporation
Friends of the Earth
Gilbert/Commonwealth Association
Glover Communications
Gold Cup Exploration, Inc.
Grace, W. R., & Co.
Grand River Institute
High Country Drifters
High Country News

Hotchkiss Woolgrowers
Impact Energy, Inc.
International Research and Evaluation
Jicarilla Archaeological Services
Kelmine Corporation
Land Protection Association, Inc.
La Plata County Cattlemen's Association
Library of Congress
Love, William B. Appraisals Inc.
Mancos Cattlemen's Association
Marathon Oil Company
MCOR Oil and Gas Corporation
Mined Land and Reclamation Division
Minerals Recovery Corporation
Mittelhauser Corporation
Mobil Producing Texas and New Mexico Inc.
Molycorp, Inc.
Mountain Bell
National Conservation Area Commission
National King Coal
National Oil Company
National Wildlife Federation
Natural Resources Defense Council
Nature Conservancy, The
Northland Research, Inc.
Northwest Pipeline Corporation
Occidental Oil Shale, Inc.
Perma Mining Corporation
Petroleum Information Corporation
Pioneer Coal Company
Public Lands Citizens' Advisory Commission
Richards & Richards
San Juan Audubon Society
San Juan Basin Research Center
Sefel Geophysics
Shell Oil Company
Shell Pipeline
Sierra Club, The
Southwest Board of Cooperative Services
Southwest Forest Industries
Standard Metals Corporation
Tera Corporation
Texas Eastern Gas Pipeline Company
Union Carbide Corporation
Union Texas Petroleum Corporation
University of Colorado Wilderness Study Group
Western Cultural Resource Management
Western Nuclear, Inc.
Wilderness Society, The
Wild Horse Organized Assistance
Wildlife Management, Inc.
Woods Canyon Archaeological Consultants
Woodward-Clyde Consultants

List of Preparers

Name	Planning responsibility	Education	Experience (years)
Scott F. Archer	Air Quality/Climate	BS, Environmental Science & Chemistry	EPA-Consultant (4 1/2 yrs); BLM-Air Quality Specialist (2 1/2 yrs)
Kristie Arrington	Cultural Resources	BA, Archaeology & Zoology, Montana State U.	BLM-SJRA Archaeologist (6 yrs); Museum of Rockies-Bozeman (1 yr); MSU field archaeologist (3 1/2 yrs)
Linda V. Branch	Writer/Editor--Coordinator	BA, Technical Journalism, Colo. State Univ.; Teaching certificate, English, Ft. Lewis College	Newspapers & nonprofit (7 yrs); BLM-Editorial assistant & writer editor (5 yrs)
Kathryn Bulinski	Lands & Realty	BS, Range & Wildland Science, Univ. of Calif. at Davis	BLM-Realty Specialist (8 yrs); BLM & USFS-Range Conservationist (1 yr); Research Assistant, UC Davis (2 yrs)
Clair Button	Wildlife	BS, Natural Resources; Univ. of Michigan	BLM-Wildlife Biologist (6 yrs)
Jeff Cameron	Fisheries Biologist	BA, Biological Science, Calif. State U. at Sacramento; Graduate School, Oregon State Univ., Fisheries/Entomology	BLM (12 yrs)
Carmen Dunn	Fire Mgmt. Officer	BS, Range	BLM (30+ yrs)
Bruce Flinn	RMP/EIS Team Leader	BS, Forest (Recreation), Colorado State Univ.	BLM (10 yrs)

List of Preparers (Continued)

Name	Planning responsibility	Education	Experience (years)
Roy Hayes	Access & Transportation		21 yrs Govt. Service; BLM (17 yrs)
Robert Kershaw	Minerals	BS, Geology	BLM-Resource Area Geologist (7 yrs)
Lori Pivonka Livingston	Recreation Technician	BS, Natural Resources & Recreation, Colorado State Univ.	USFS (1 yr)
Chip Marlow	Outdoor Recreation Planner	BS, Forest Recreation & Park Mgmt.; MS, Recreation & Park Mgmt., Southern Illinois Univ.	BLM-Recreation Planner (12 yrs)
Francisco Mendoza	Visual Resources	BS, Landscape Architecture, Univ. of Arizona	Heritage Conservation & Recreation Service (Outdoor Recreation Planner) (3 yrs); BLM-Landscape Architect (3 yrs)
Dennis Murphy	Water Resources	BS, Forest Watershed Mgmt., 1 yr. Graduate School, Utah State Univ.	BLM-Hydrologist (6 yrs)
Ray Orazem	Forestry	BS, Forest Recreation, Colo. State Univ.	BLM (14 yrs)
Barbara Ramsey	Word Processor	Business Adm., Pratt Community College	Editorial Assistant/Word Processor, Kansas State University; Federal Trade Commission, USGS, & BLM (10 yrs)

List of Preparers (Continued)

Name	Planning responsibility	Education	Experience (years)
Carlos Romaniello	Economics	MS, Agricultural Economics, U. of Arizona	U. of Arizona-Economist (2 yrs); Foreign Agricultural Service (1 1/2 yrs); BLM-Economist (2 1/2 yrs)
Doug Scott	Archaeologist	BS, Anthropology; PhD, Anthropology; U. of Colorado	BLM-Archaeologist (8 yrs)
Jon Wesley Sering	Wilderness Resource	BA, Geography, Calif. State Univ. at Long Beach; MS, Geography/Wilderness Mgmt; Univ. of Idaho	USFS-Wilderness Ranger (8 yrs); BLM-Wilderness Coordinator (7 yrs)
Ed Singleton	Natural Resource Specialist	BS, Range Management, New Mexico State Univ.; some Graduate School in Range Management	USFS (3 yrs); BLM (7 yrs)
Bob Stanger	Range	BS, Conservation, Idaho State Univ.	BLM-Range Conservation (8 yrs)
Al Tohill	Range	BA, General Biology, Hastings College	BLM-Range Conservation (8 yrs)
William Ypsilantis	Soils	BS, Forest Management, Michigan Technological Univ.; MS, Forest/Soils, Univ. of Idaho	BLM (7 yrs)

GLOSSARY

ACRE-FOOT-Quantity of water or other material required to cover 1 acre to a depth of 1 foot or a volume of 43,560 cubic feet.

ACTUAL USE-Use made of forage on any area by livestock and(or) wildlife without reference to permitted or recommended use.

ALLOTMENT-Area of land designated and managed for livestock grazing.

ALLOTMENT MANAGEMENT PLAN (AMP)-Document program which applies to livestock operations on the public lands, prepared in consultation, cooperation, and coordination with the permittee(s), lessee(s), or other affected interests.

ALTERNATIVE-One of several policies, plans or projects proposed to formulate alternatives and to estimate various impacts and effects.

ANIMAL UNIT MONTH (AUM)-Amount of forage necessary for the sustenance of one animal for one month, e.g., one deer for one month equals one deer AUM.

AQUATIC-Living or growing in or on a stream or other water body or source.

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)-An area where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes or to protect life and safety from natural hazards.

AREAS OF CRITICAL MINERAL POTENTIAL (ACMP)-Area identified and nominated by the public as having significant mineral potential. In this case, significant means that the mineral resources are important to the local, regional, or national economy or could become important in the future.

BASEFLOW-Water that enters stream channel from springs or ground water seepage.

BASIN-Land area drained by a river and its tributaries.

BEDROCK-Any solid rock underlying soil, sand, clay, silt, and any other earthly materials.

BIG GAME-Larger species of wild animals that are hunted, such as elk, deer, bighorn sheep, and pronghorn antelope.

BOARD FOOT-Measure of amount of timber equivalent to a piece 12" x 12" x 1".

CARRYING CAPACITY-Also known as stocking rate; estimate of maximum number of animals (expressed in AUMs) a given area can support each year without inducing damage to vegetation or related resources.

CHANNEL EROSION-Process of eroding perennial or intermittent drainage channel and banks by natural forces of flowing water.

CHEMICAL WATER QUALITY-Measurements of chemical parameters (alkalinity, dissolved oxygen, dissolved iron, etc.) used to describe water quality.

CHERRYSTEM-Fingerlike intrusions into a WSA that are not part of the WSA; for example, an access road.

CIST-Box or chest especially used for sacred utensils in prehistoric tombs or caskets.

CLEAR CUTTING-Even-aged silvicultural system in which old crop is cleared at one time; regeneration is generally natural through seeding from adjacent stands or from cone-bearing slash.

COAL UNSUITABILITY CRITERIA-Regulations developed by BLM which use ability of an

area's surface resources to accept or absorb impacts of coal mining activities as means to determine suitability or unsuitability of area for coal mining.

CONTRAST-Effect of striking difference in form, line, color, or texture of landscape features within area being viewed.

CRITICAL RANGE-Range on which species depends for survival; there are no alternative ranges available due to climate conditions or other limiting factors.

CRUCIAL WINTER RANGE-That portion of winter range to which wildlife species are confined during periods of heaviest snow cover.

CULTURAL RESOURCES-Those fragile and nonrenewable remains of human activity, occupation, or endeavor reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features that were of importance in human events. Consist of (1) physical remains, (2) areas where significant human events occurred--even though evidence of event no longer remains, and (3) environment immediately surrounding resource.

CULTURAL RESOURCE INVENTORY-Descriptive listing and documentation, including photographs and maps, of cultural resources; included are processes of locating, identifying, and recording sites, structures, buildings, objects, and districts through library and archival research, information from persons knowledgeable about cultural resources, and varying levels of intensity of on-the-ground field surveys.

CULTURAL RESOURCE SITE-Physical location of past human activities or events. Cultural resource sites are extremely variable in size and range from location of single cultural resource object to cluster of cultural resource structures with associated objects and features. Prehistoric and historic sites that are recorded as cultural resources have sociocultural or scientific values and meet general criterion of being more than 50 years old.

CULTURAL SURVEYS-

Class I: Review and compilation of known cultural resource data.

Class II: Sample-oriented field inventory (3% to 15%).

Class III: Complete surface inventory of specific area (intensive--100%).

CURRENT-Refers to 1984 when used in this RMP.

CURRENT AUTHORIZED USE-Current active grazing preference (in AUMs).

CURRENT ACTIVE PREFERENCE-Total number (active and suspended nonuse) of AUMs of livestock grazing on public land apportioned and attached to base property owned or controlled by a permittee.

DIRECTIONAL DRILLING-Drilling borehole wherein course of hole is planned before drilling. Such holes are usually drilled with rotary equipment at an angle to the vertical and are useful in avoiding obstacles or in reaching side areas.

DIVERSITY-Relative degree of abundance of wildlife species, plant species, communities, habitats, or habitat features per unit of area.

EASEMENT-Right afforded a person or agency to make limited use of another's real property for access or other purposes.

ECOLOGICAL-Pertaining to subspecies or race that is especially adapted to particular set of environmental conditions.

ECOSYSTEM-A community which includes all component organisms, together with associated environmental factors, and forms an interacting system.

EGRESS-Act or right of coming out.

EMPHASIS AREA-Area where particular resource such as wildlife habitat, would receive management emphasis or priority; it is either unique, significant, or best suited for development, management, use, or protection of a resource. Principles of multiple use and sustained yield would be maintained in each emphasis area; in addition, many different uses are allowed. Other land uses would have limits placed on them to prevent conflicts with the priority resource.

ENVIRONMENTAL ASSESSMENT (EA)-Analysis of all actions and their predictable short- and long-term environmental effects, which include physical, biological, economic, and social factors and their interactions.

ENVIRONMENTAL IMPACT STATEMENT (EIS)-Version of the statement of environmental effects required for major Federal actions under Section 102 of NEPA and released to the public and other agencies for comment and review. It is a formal document that must follow requirements of NEPA, CEQ guidelines, and directives of the agency responsible for the proposed project or plan.

EROSION CONDITION CLASS-Classification system for ranking soil erosion in increments of 20 points: 0-20 = stable; 21-40 = slight; 41-60 = moderate; 61-80 = critical; and 81-100 = severe.

EXCAVATION-Controlled scientific removal of artifacts and recording of data from subsurface cultural resource deposits.

EXTENSIVE RECREATION MANAGEMENT AREA (ERMA)-In these areas, significant recreation opportunities and problems are limited and intensive recreation management is not required. Minimal management actions are adequate.

EYRIE-Nesting site of bird of prey, as an eagle or a hawk.

FARMLANDS-Arable lands currently under cultivation.

FLOODPLAIN-Nearly level alluvial plain that borders a stream and is subject to inundation during high water. Minimum area included is that subject to a 1% (100-year recurrence) or greater chance of flooding in any given year.

FLUVIAL-Of or pertaining to rivers.

FORAGE-All browse and herbaceous foods that are available to grazing animals; may be grazed or harvested for feeding.

FOREGROUND-MIDDLEGROUND-Area visible from a travel route, use area, or other observer position from a distance of 3 to 5 miles (VRM term).

FOREST SET-ASIDES-Productive forest lands that, because of other conflicts, are withdrawn from the BLM allowable harvest base.

GABION-Wire mesh basket filled with rocks and used to protect erodible streambanks or used to create dams, deflectors, or other instream structures.

GRAZING SYSTEM-Systematic sequence of grazing treatments applied to an allotment to reach identified multiple use goals or objectives by improving quality and quantity of vegetation.

GRAZING TREATMENT-Prescription under a grazing system which grazes or rests a unit of land at particular times each year to attain specific vegetation goals.

GROUND COVER (SOIL)-Material covering soil and providing protection from, or resistance to, impact of raindrops, expressed in percent of area covered. Composed of vegetation, litter, erosion pavement, and rock.

GROUND WATER-Subsurface water occupying saturation zone, from which wells and

springs are fed (strictly speaking, only refers to water below water table).

HABITAT-Specific set of physical conditions that surround single species, group of species, or large community. In wildlife management, major components of habitat are food, water, cover, and living space.

HABITAT MANAGEMENT PLAN (HMP)-Written and officially approved plan for specific geographic area which identifies wildlife habitat and related objectives, establishes consequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

IMPRINTS-Evidence of past presence, such as a foot bridge across a creek in an otherwise pristine setting.

INGRESS-Act of entering.

INTENSIVE MANAGEMENT-Managing vegetation or other resource through a system to obtain desired results.

INTERMITTENT STREAM-Stream which flows only at certain times of the year when it receives water from springs or from some surface source such as melting snow in mountainous areas.

INTERPRETIVE SITES-Developed site at which broad range of natural or cultural history is interpreted or described for public enjoyment.

KNOWN GEOLOGIC STRUCTURE (KGS)-Trap in which an accumulation of oil and gas has been discovered by drilling and which is determined to be productive, the limits of which include all acreage that is presumptively productive (43 CFR 3100.0-5[a]). If lands are underlain by a "known geologic structure" (KGS), they may be leased only through a competitive system.

KNOWN RECOVERABLE COAL RESOURCE (KRCRA)-Area that includes Federal lands that meet minimum standards for recoverable coal accordance with accepted mining practices, as determined by the Director of the USGS. The Federal lands in a KRCRA are classified for coal leasing.

LEASABLE MINERALS-Minerals such as coal, oil shale, oil and gas, and all other minerals that may be acquired under the Mineral Leasing Act of 1920, as amended.

LEASE-Instrument through which interests are transferred from one party to another, subject to certain obligations and considerations.

LICENSED USE-Active use AUMs that a permittee has paid for during given grazing period.

LITHIC SCATTER-Stone debris left as result of tool manufacture or reshaping.

LOCATABLE MINERALS-Minerals that may be acquired under the Mining Law of 1972, as amended.

MBF-One thousand board feet of timber.

MESA-A tableland, a flat-topped mountain or other elevation bounded on at least one side by a steep cliff.

MITIGATION-Alleviation or lessening of possible adverse effects on a resource by applying appropriate protective measures or adequate scientific study.

MMBF-One million board feet of timber.

MULTIPLE USE-Management of public lands and their various resource values so they are used in the combination that will best meet the present and future needs of the American people.

NATIONAL NATURAL LANDMARK-Designated because of nationally significant ecologic or geologic features.

NATIONAL REGISTER OF HISTORIC PLACES-Official list, established by the Historic Preservation Act of 1966, of the nation's cultural resources worthy of preservation.

NATURALNESS-Refers to area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable" (Sec. 2[c] of the Wilderness Act of 1964).

NO ACTION ALTERNATIVE-Most likely condition expected to exist in the future if current management would continue unchanged.

NORMAL YEAR FIRE PLAN-Overall fire suppression plan of given geographic area for one calendar year.

OFF-ROAD VEHICLE (ORV)-Any motorized vehicle capable of, or designed for travel on or immediately over land, water, or other natural terrain, where no road exists.

OPERABLE WOODLAND-Forest lands bearing or capable of bearing vegetation products of commercial character and economically available now or prospectively for commercial use and not otherwise withdrawn from such use.

OUTSTANDING NATURAL AREA-(43 CFR 2071.1)-Areas of outstanding scenic splendor, natural wonder or scientific importance that merit special attention and care in management to insure their preservation in their natural condition. These usually are relatively undisturbed, representative of rare botanical, geological, or zoological characteristics of principle interest for scientific research purposes.

PALEONTOLOGY-Science dealing with life and past geologic periods as known from fossil remains.

PERENNIAL WATER-Bodies of water or streams that contain water yearlong.

PERMITTEE-One who holds permit to graze livestock on public land.

PETROGLYPH-Picture or hieroglyph incised or carved into a surface, usually stone.

PICTOGRAPH-Picture or hieroglyph painted on some surface, usually stone (figures, characters, or writing which is difficult to decipher, originally referred to the Egyptian).

PLANNING CRITERIA-Criteria prepared to guide planning process and management direction.

PLANT VIGOR-State of health of a plant or capacity of plant to respond to growing conditions, to make and store food, and to complete reproductive stages.

POTHUNTING-Slang term used by professional archaeologists to describe illegal or non-professional relic collecting.

PREFERENCE RIGHT LEASE-Right of applicant to apply for resources in public lands before general public. For example, an applicant who had discovered a mineral deposit under a prospecting permit might be allowed a preference right lease over any other lease applicant.

PROSPECTIVELY VALUABLE-Land within a sedimentary basin or petroleum province where thickness of sediments is 1,000 feet or greater and where there is evidence of oil and gas, folding and faulting.

PUBLIC ISSUE-Subject or question of widespread public discussion or interest regarding management of public land (BLM administered) and identified through public participation.

PUBLIC LAND-Vacant, unappropriated, and unreserved lands which have never left Federal ownership; also, lands in Federal ownership which were obtained by the Government in exchange for public lands or for timber on public lands (also land administered by BLM).

RANGE ALLOTMENT-Area designated for use of prescribed number of cattle or sheep or by common use of both under one management plan.

RANGE IMPROVEMENT-Structure, development, or treatment used to rehabilitate, protect, or improve public lands to enhance range resource.

RANGELAND MONITORING PROGRAM-Program designed to measure changes in plant composition, ground cover, animal populations, and climatic conditions on public rangeland. Vegetation studies, used to monitor changes in rangeland condition and determine reason for any changes that are occurring, consist of actual use, utilization, trend, and climatic conditions.

RANGE SITE-Distinctive kind of rangeland that differs from other kinds of rangeland in its potential to produce native plants.

RAPTOR-Birds of prey with sharp talons and strongly curved beaks; e.g., hawks, owls, vultures, eagles.

RECLAMATION-Returning disturbed lands to form and productivity that will be ecologically balanced and in conformity with a predetermined land management plan.

RECREATION OPPORTUNITY SPECTRUM (ROS)-Continuum used to characterize recreation opportunities in terms of setting, activity, and experience opportunities.

RECREATION VISITOR DAY (RVD)-Aggregation of 12 visitor hours, where a visitor hour is the presence of one or more person on lands and water for outdoor recreation purposes for continuous, intermittent, or simultaneous periods aggregating 60 minutes; e.g., one person for one hour.

RESEARCH NATURAL AREA (RNA)-Area that is established and maintained for primary purpose of research and education because the land has threatened or endangered plant or animal species. A biological unit in which present natural conditions are maintained by allowing natural biological processes to prevail without human intervention.

RINCON-Drainage basin, somewhat shallow, surrounded on three sides by low vertical rock rims (or a sequence of such rims).

RIPARIAN-Situated on or pertaining to bank of river, stream, or other body of water. Normally used to refer to plants of all types that grow rooted in watertable of streams, ponds, and springs.

RIPARIAN COMMUNITIES-Vegetation communities found in association with either open water or water close to surface; includes meadows, aspen, and other trees and shrubs in association with streams and other water sources.

RIPARIAN HABITAT, AQUATIC-Vegetation communities found in association with streams (both perennial and intermittent), lakes, ponds and other open water. This unique habitat, comprising less than 1 percent of land area, is crucial to continued existence of the fish species known to occur. Streamside vegetation maintains high water tables, stabilizes streambanks, creates quality fishery habitat, and maintains water quality. It is also essential to most terrestrial wildlife species.

RIPARIAN HABITAT, TERRESTRIAL-Vegetation communities found in association with either open water or water close to surface; includes such habitat features as meadows, aspen stands, and(or) other trees and shrubs. This unique habitat is crucial to continued existence of majority of terrestrial wildlife species known to occur. Many species are found no where else.

ROAD-Vehicle routes which have been improved and maintained by mechanical means to insure relatively regular and continuous use.

ROADLESS-Refers to absence of roads that have been improved and maintained by mechanical means to ensure relatively regular and continuous use (a way maintained by vehicle passage does not make up a road).

SCENIC QUALITY-Degree of harmony, contrast, and variety within a landscape.

SCOPING PROCESS-Early process for determining scope of issues to be addressed and for identifying significant issues related to proposed action.

SEDIMENT YIELD-Amount of sediment given up by watershed over specific time period, usually a year. Ordinarily, it is expressed as tons, acre feet, or cubic yards of sediment per unit of drainage area per year.

SEDIMENTATION-Act or process of depositing material, such as water, depositing suspended soil particles in an area, such as stream bottom.

SHEET EROSION-Removing a fairly uniform layer of soil from land surface by runoff water, without developing conspicuous water channels.

SOIL CLASSIFICATION-Systematic arrangement of soils into groups or categories on basis of their characteristics.

SOLITUDE-(1) State of being alone or remote from habitation, isolation; (2) lonely, unfrequented, or secluded place.

SPECIAL RECREATION MANAGEMENT AREA (SRMA)-Areas requiring explicit recreation management to achieve BLM's recreation objectives and to provide specific recreation opportunities.

SPECIAL STIPULATIONS-Stipulations which allow BLM to require modifying proposed operations that would prevent economic extraction of otherwise commercial oil and gas deposits. Special stipulations are used if there are resources, values, uses, and(or) users present that: (1) cannot coexist with oil and gas operations; (2) cannot be adequately managed and(or) accommodated on other lands for the duration of oil and gas operations; and (3) provide a greater benefit to the public than that of oil and gas operations.

SPECIES, ENDANGERED-Animal or plant whose prospects of survival and reproduction are in immediate jeopardy, and as is further defined by the Endangered Species Act of 1973, as amended.

SPECIES, SENSITIVE-Designation which is (1) applied to species not yet officially listed but which are undergoing status review or are proposed for listing according to Federal Register notices published by the Secretary of the Interior; (2) applied to species whose populations are consistently small and widely dispersed or whose ranges are restricted to a few localities, such that any appreciable reduction in numbers, habitat availability, or habitat condition might lead toward extinction; or (3) applied to species whose numbers are declining so rapidly that official listing may become necessary as a conservation measure.

SPECIES, THREATENED-Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, and as is further defined by the Endangered Species Act of 1973, as amended.

STANDARD STIPULATIONS-Existing contractual controls wherein BLM may require modification to the setting, design, and timing of operations on leaseholds. BLM also is required to specify interim and final reclamation measures under these stipulations.

SUITABLE COMMERCIAL FOREST LANDS-Commercial forest lands determined to be suitable for timber production as identified in the TPCC process.

SUSTAINED YIELD-Achievement and maintenance in perpetuity of high level of annual or regular periodic output of various renewable resources of public lands consistent with multiple use.

SYNOPTIC (METEOROLOGY)-Data gathered from a large area, used primarily in weather forecasting.

TIMBER PRODUCTION CAPABILITY CLASSIFICATION (TPCC)-Process of partitioning forest land into major classes indicating relative suitability to produce timber on a sustained yield basis.

TOTAL DISSOLVED SOLIDS (TDS)-Total amount of dissolved material, organic and inorganic, contained in water or wastes.

TOTAL SUSPENDED PARTICULATES (TSP)-Portion of total particulate matter in atmosphere consisting of particles so small (< 50 microns in diameter) that they settle out slowly.

TREND-Direction of change in range condition over a period of time, expressed as upward, static, or downward.

UNALLOTTED ALLOTMENT-Allotment where a previous permittee has relinquished preference or BLM has canceled preference. Not currently used by livestock.

UNDERSTORY-Plants growing beneath canopy of other plants; usually refers to grasses, forbs, and low shrubs under tree or brush canopy.

UNIVERSAL SOIL LOSS EQUATION (USLE)-Empirical erosion model, originally designed for agricultural situations that computes long-term average soil losses from sheet and rill erosion under specific conditions.

UTILITY CORRIDOR-Tract of land varying in width forming passageway through which various commodities such as oil, gas, and electricity are transported.

UTILIZATION-Portion of current year's forage production that is consumed or destroyed by grazing animals. May refer either to single species or to vegetation as a whole.

VEGETATION-Plants in general or sum total of plant life above and below ground in area.

VEGETATION CONDITION-Condition rating based on amount of forage (lb/ac) currently produced on an allotment in relation to its potential forage production (lb/ac).

VEGETATION CONDITION INVENTORY-Inventory conducted which includes field mapping of range sites by condition class for individual grazing allotments. This information was used to determine initial carrying capacities by allotment.

VEGETATION MANIPULATION-Alteration of present vegetation by using fire, plowing, spraying, or other means to manipulate natural successional trends.

VEGETATION TYPE-Plant community with immediately distinguishable characteristics based upon and named after apparent dominant plant species.

VISUAL RESOURCE-Land, water, vegetation, animal, and other visible features.

VISUAL RESOURCE MANAGEMENT (VRM)-Planning, designing, and implementation of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities.

VISUAL SENSITIVITY-Degree of concern expressed by user toward scenic quality and existing or proposed visual change in particular characteristic landscape.

WATERSHED-Total area of land above given point on waterway that contributes runoff water to flow at that point.

WAY-Track that is maintained solely by passage of vehicles.

WILDCAT DRILLING-To drill and develop unproven ground far from previous production, generally of a risky nature.

WILDERNESS-Definition contained in Sec. 2(c) of the Wilderness Act of 1964 (78 Stat. 891): A wilderness in contrast with those areas where man and his own works dominate the landscape is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean. . .an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological or other features of scientific, educational, scenic, or historical values.

WILDERNESS CHARACTERISTICS-Identified by Congress in the 1964 Wilderness Act: namely, size, naturalness, outstanding opportunities for solitude or a primitive and unconfined type of recreation, and supplemental values such as geological, archaeological, historical, ecological, scenic, or other features. It is required that the area possess at least 5,000 acres or more of contiguous public land or be of a size to make practical its preservation and use in an unimpaired condition; be substantially natural or generally appear to have been affected primarily by the forces of nature, with the imprint of man being substantially unnoticeable; and have either outstanding opportunities for solitude or a primitive and unconfined type of recreation. Congress stated that a wilderness area may also have supplemental values.

WILDERNESS MANAGEMENT POLICY-Policy document prescribing the general objectives, policies, and specific activity guidance applicable to all designated BLM wilderness areas. Specific management objectives, requirements, and decisions implementing administrative practices and visitor activities in individual wilderness areas are developed and described in the wilderness management plan for each unit.

WILDERNESS STUDY AREA (WSA)-Roadless area of land that has been inventoried and found to have wilderness characteristics as described in Section 603 of FLPMA and Section 2(c) of the Wilderness Act of 1964 (78 Stat. 891).

WILDERNESS VALUES-Wilderness characteristics and multiple resource benefits of an area.

WILD HORSES-All unbranded and unclaimed horses and their progeny that have public lands on or after December 15, 1971, or that do use these lands as all or part of their habitat.

WILDLIFE HABITAT-Sum total of environmental conditions of specific place occupied by wildlife species or population of such species.

WILDLINGS-Tree or shrub suitable for landscape transplant.

WINTER RANGE-Area occupied by animal species during winter.

WOODLAND-Land that supports forest species, generally referred to as fuelwood, sold on cord or post basis.

WOODLAND PRODUCTION CAPABILITY CLASSIFICATION (WPCC)-Process of partitioning woodlands into major classes indicating relative suitability to produce woodland products on sustained yield basis.

ACRONYMS

ACEC - Area of Critical Environmental Concern
ACMP - Area of Critical Mineral Potential
AMP - Allotment Management Plan
AUM - Animal Unit Month
BIA - Bureau of Indian Affairs
BLM - Bureau of Land Management
BMP - Best Management Practices
CDOW - Colorado Division of Wildlife
CEQ - Council on Environmental Quality
CFR - Code of Federal Regulations
CRMP - Cultural Resource Management Plan
DEIS - Draft Environmental Impact Statement
DOE - Department of Energy
EA - Environmental Analysis
EIS - Environmental Impact Statement
EPA - Environmental Protection Agency
ERMA - Extensive Recreation Management Area
FEIS - Final Environmental Impact Statement
FLPMA - Federal Land and Policy Management Act (also known as BLM's Organic Act; 1976)
GEM - Geological, Energy, and Minerals (Reports)
GMU - Game Management Unit (CDOW)
HMP - Habitat Management Plan
IMP - Interim Management Policy
KGS - Known Geologic Structure
KRCRA - Known Recoverable Coal Resource Area
MBF - Thousand Board Feet
mcf - Thousand Cubic Feet
MFP - Management Framework Plan
MMBF - Million Board Feet
mmcf - Million Cubic Feet
MSA - Management Situation Analysis
NEPA - National Environmental Policy Act
NRDC - Natural Resource Defense Council
NRHP - National Register of Historic Places
NWPS - National Wilderness Preservation System
ONA - Outstanding Natural Area
ORV - Off-Road Vehicle
PL - Public Law
PSD - Prevention of Significant Deterioration
RMP - Resource Management Plan
RNA - Research Natural Area
ROS - Recreation Opportunity Spectrum
ROW - Rights-of-Way
R&PP - Recreation and Public Purposes
RVD - Recreation Visitor Day
SCS - Soil Conservation Service
SJNF - San Juan National Forest
SJRA - San Juan Resource Area
SJ/SM - San Juan/San Miguel
SRMA - Special Recreation Management Area
TDS - Total Dissolved Solids
T&E - Threatened and Endangered (species)
TSP - Total Suspended Particulates
USC - United States Code
USFS - United States Forest Service
USFWS - U.S. Fish and Wildlife Service
USLE - Universal Soil Loss Equation
VRM - Visual Resource Management
WO - Washington Office
WSA - Wilderness Study Area(s)

APPENDICES

ABBEVDICE2

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APPENDIX ONE

BLM-FOREST SERVICE EXCHANGE

(See Draft RMP)

APPENDIX TWO

VISUAL RESOURCE MANAGEMENT (VRM) CLASSIFICATION PROCESS

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APPENDIX THREE

RECREATION OPPORTUNITY SPECTRUM

(See Draft RMP)

APPENDIX FOUR

MINERALS

Introduction

Appendix Four discusses the BLM's oil and gas and coal leasing found within the planning area; major items discussed include:

1. A summary table of the oil and gas leasing in the planning area that details the acreage broken out according to proposed stipulations or information notices (see Table 4-1).

2. Maps of the proposed no-surface occupancy areas for Cross, Cahone, and Squaw/Papoose canyons (Maps 4-1 and 4-2).

3. A narrative of the proposed oil and gas lease information notices and stipulations to be applied on specific areas throughout the planning area.

4. A table and maps of the pre-FLPMA oil and gas leases contained in the WSAs found in the planning area (Table 4-3 and Maps 4-3 through 4-5).

5. Examples of the current BLM oil and gas and coal lease forms (see p. 4-23 through 4-27 of this Appendix).

Table 4-1.--Introduction

1. Lands Open to Development Without Lease Stipulations--Public lands that may require enforcing certain operating constraints seasonally or of limited duration, through the use of information notices.* These constraints on lands, such as elk calving grounds or big game winter ranges, would still allow a leaseholder to develop the lease without greatly increased cost or delay.

2. Lands Open to Development with Stipulations--Public lands where necessary and justifiable stipulations would have to be attached to leases for adequate environmental protection. The land, such as scenic areas and cultural sites, should still be generally developable but only at increased cost to the developer.

3. Lands Closed to Leasing--Public lands where oil and gas leasing are not permitted under law, regulation, or Secretarial policy; where lands are formally withdrawn; or withdrawal is being considered.

Note: The old BLM oil and gas lease form did not offer the degree of resource protection that the new BLM lease form (March 1984; see p. 4-21 and 4-22 of this Appendix) offers. Stipulations were previously used to protect resources that can now be managed through the use of information notices attached to the new lease form. BLM will still enforce environmental protection of the resources but through the legal contract of the lease form.

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* Information notices are used to transmit information (when the lease is issued) that will assist lessees in submitting acceptable Plans of Operations or that concerns administrative matters relative to lease management. Information notices cannot involve new restrictions. Any requirements contained in information notices must already appear in the standard lease terms, regulations, or operational orders.

Table 4-1. RMP/EIS Oil and Gas Leasing--Continued. 1/

Kinds of stipulations	Current Management Alternative		Resource Conservation Alternative		Resource Utilization Alternative		Preferred Alternative	
	PV	KGS	PV	KGS	PV	KGS	PV	KGS
Open to Leasing								
Without Information Notices	766,000	176,420	680,484	158,240	736,515	176,180	715,305	164,290
With Information Notices and(or) Stipulations								
Winter range	237,360	1,140	247,750	1,140	247,750	1,140	247,750	1,140
Elk calving grounds	9,700		9,700		9,700		9,700	
Grouse strutting area	2,400	520	2,400	520	2,400	520	2,400	520
Peregrine falcon area (Paradox Valley)	2,160		2,160		2,160		2,160	
Winter eagle concentration areas	46,180	3,240	49,780	3,240	49,780	3,240	49,780	3,240
Subtotal	1,063,800	181,320	992,274	163,140	1,048,305	181,080	1,027,095	169,190
Open to Leasing With Stipulations (No-Surface Occupancy Stipulations)								
Wildlife								
McElmo Research Natural Area	400		0	0	0	0	400	
Peregrine falcon areas								
Mesa Verde	200		200		200		200	
Perins Peak	920		2,400		2,400		2,400	

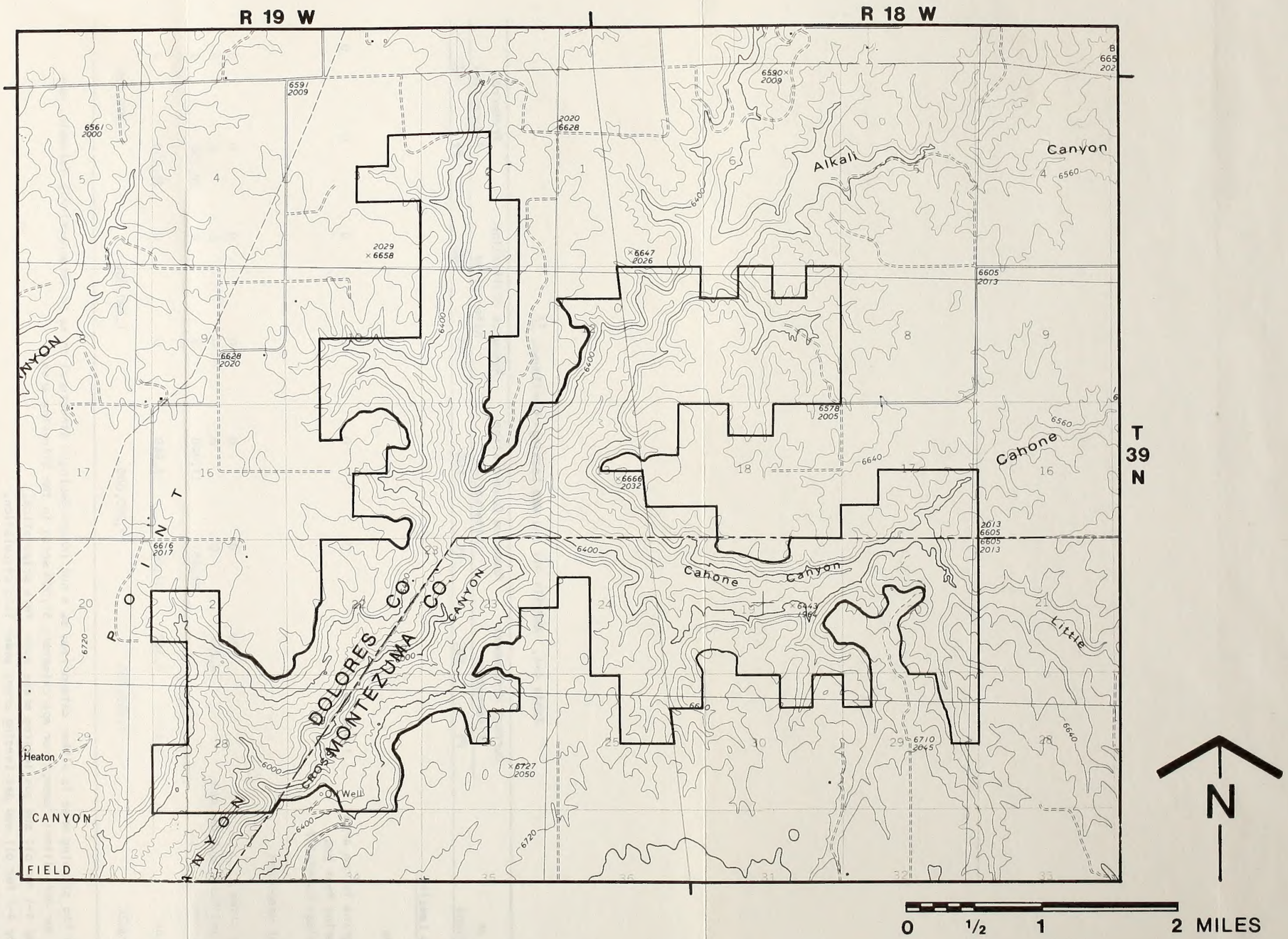
Table 4-1. RMP/EIS Oil and Gas Leasing--Continued. [1/]

Kinds of stipulations	Current Management Alternative		Resource Conservation Alternative		Resource Utilization Alternative		Preferred Alternative	
	PV	KGS	PV	KGS	PV	KGS	PV	KGS
Open to Leasing with Stipulations (continued)								
(No-Surface Occupancy Stipulations)								
Cultural Resources								
Battle Rock		40		40		40		40
Bull Canyon Rockshelter			5		5		5	
Cahone Canyon [2/]							5,750	2,600
Cannonball Ruin		80		80		80		80
Cross Canyon [3/]							2,320	8,210
Dolores Cave			60		60		60	
Easter Ruin		80		80		80		80
Dominguez-Escalante Ruins	40		40		40		40	
Hovenweep Buffer		600		600		600		600
Indian Henry's Cabin			160		160		160	
Lightning Tree Tower Group				160		160		160
Lowry Ruin & Associations		240		240		240		240
McLean Basin Towers		80		80		80		80
Painted Hand Petroglyphs		120		120		120		120
Painted Hand Ruin				80		80		80
Sand and East Rock canyons		1,640		5,880		5,880		5,880
Seven Towers Ruin Group		40		40		40		40
Squaw/Papoose Canyon [3/]							3,460	1,080
Tabeguache Canyon & Cave							560	
Tabeguache Pueblo			120		120		120	
Recreation								
Dolores River Canyon	33,160	1,520	20,080	1,520	48,710	1,520	20,080	1,520
Menefee Mountain							4,040	
Weber Mountain							4,680	
Total	34,720	4,320	23,065	8,920	51,695	8,920	44,275	20,810

Table 4-1. RMP/EIS Oil and Gas Leasing--Continued. [1/]

Kinds of stipulations	Current Management Alternative		Resource Conservation Alternative		Resource Utilization Alternative		Preferred Alternative	
	PV	KGS	PV	KGS	PV	KGS	PV	KGS
Closed to Leasing								
Wildlife								
Peregrine falcon area (Perins Peak and Animas Mountain)	1,480		0	0	0	0	0	0
Cultural Resources								
Other sites		120	0	0	0	0	0	0
Sand and East Rock canyons		4,240	0	0	0	0	0	0
Wilderness			84,661	17,940	0	0	28,630	0
Total	1,480	4,360	84,661	17,940	0	0	28,630	0
Grand Total [4/]	1,290,000		1,290,000		1,290,000		1,290,000	

[1/] All of the planning area is either categorized as a KGS (Known Geologic Structure) or as PV (Prospectively Valuable, see glossary for definition), except for approximately 51,000 acres in the Silverton area.
[2/] See Map 4-1 for oil and gas leasing areas under this stipulation.
[3/] See Map 4-2 for oil and gas leasing areas under this stipulation.
[4/] Approximately 190,000 acres of KGS.

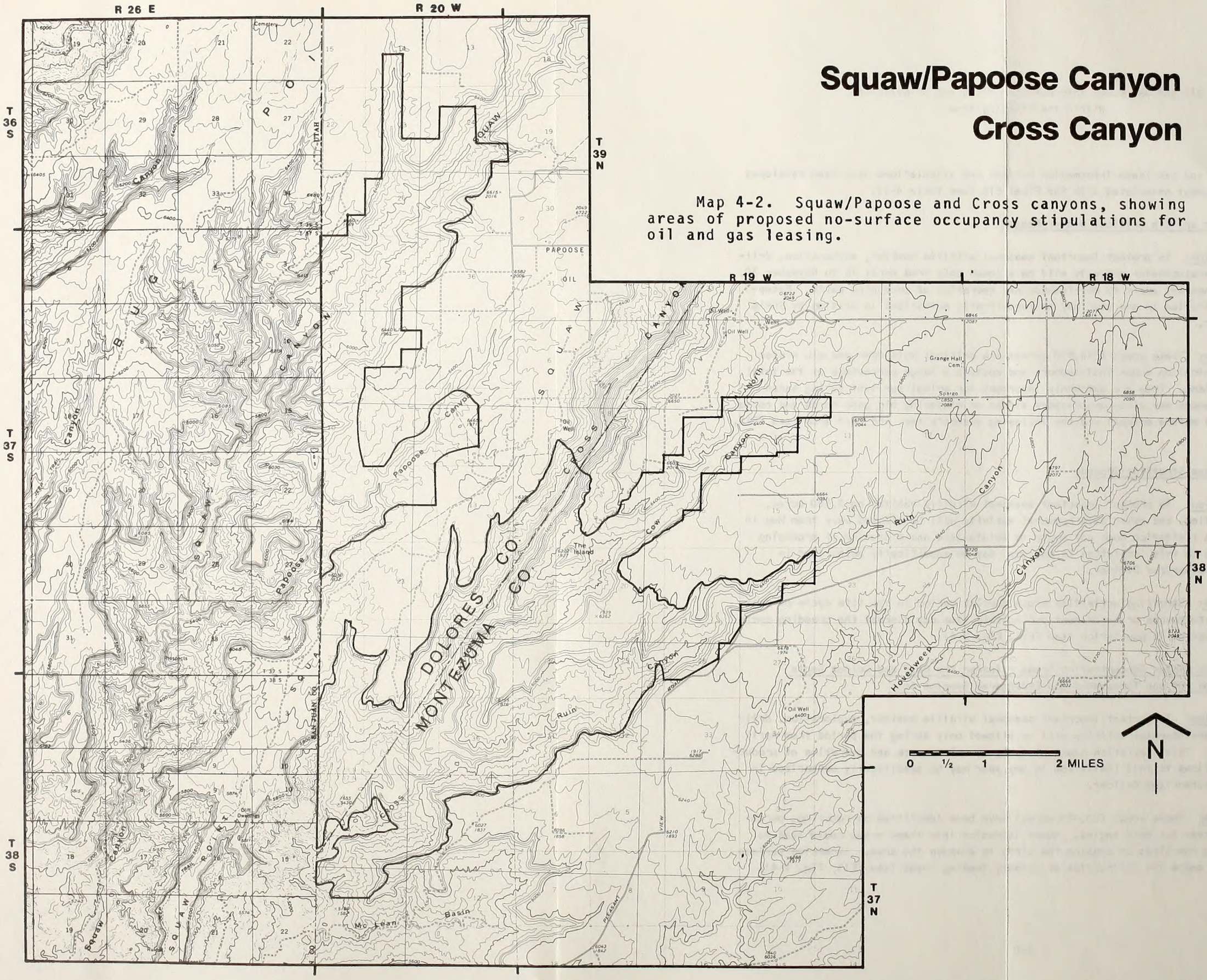


Map 4-1. Cahone Canyon, showing areas of proposed no-surface occupancy stipulations for oil and gas leasing.

Cahone Canyon

Squaw/Papoose Canyon
Cross Canyon

Map 4-2. Squaw/Papoose and Cross canyons, showing areas of proposed no-surface occupancy stipulations for oil and gas leasing.



4. Important Peregrine Falcon Nesting Habitat (Perins Peak and Mesa Verde National Park)

Stipulation: No-Surface Occupancy

Narrative: This land (2,600 acres) has been identified as critical habitat for peregrine falcons, a Federally listed endangered species. Human intrusion into these areas could lead to illegally shooting the birds or could cause the birds to abandon the area. Disturbances during the nesting period could cause missed feedings of young with subsequent mortality (see FEIS, Fig. 2-4).

5. Important Peregrine Nesting Habitat (Paradox Valley Area)

Stipulation: To protect important seasonal wildlife habitat, exploration, drilling, and other developmental activity will be allowed only from September 1 to February 28. This limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation in any year may be specifically authorized in writing by BLM's Authorized Officer.

Narrative: This land (2,160 acres) has been identified as critical habitat for peregrine falcons, a Federally listed endangered species. Human intrusion into these areas could lead to illegally shooting the birds or could cause the birds to abandon the area. Disturbances during the nesting period could cause missed feedings of young with subsequent mortality (see FEIS, Fig. 2-4).

6. Elk Calving Area

Stipulation: To protect important seasonal wildlife habitat, exploration, drilling, and other developmental activity will be allowed only from July 16 to April 30 on elk calving areas. This limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation in any year may be specifically authorized in writing by BLM's Authorized Officer.

Narrative: These important areas (9,700 acres) have been identified by the BLM and DOW. The reproductive season is a crucial period in the life cycle of these species. Disturbances during this period may create unnecessary stress and reduce the herd productivity (see FEIS, Fig. 2-3).

7. Dolores River Canyon

Stipulation: No-Surface Occupancy

Narrative: These portions of the Dolores River Canyon (21,600 acres) contain significant recreational and visual values. The no-surface occupancy stipulation is meant to protect the main portion and viewshed of the Dolores River Canyon. The viewshed is portrayed on the maps in the Sacred Mountain and San Miguel Oil and Gas Umbrella EAs on file in the San Juan Resource Area. Operations proposed on the described lands will not be approved, unless it is shown to BLM's Authorized Officer's satisfaction that the stipulation objective can still be met.

8. McElmo Research Natural Area (RNA)

Stipulation: No-Surface Occupancy

Narrative: This RNA contains important habitat for rare species of flora and fauna. Disturbance could disrupt ongoing research in the area.

9. Menefee and Weber Mountains

Stipulation: No-Surface Occupancy

Narrative: These two mountains (encompassing 8,720 acres) contain unique roadless, backcountry values. Lying within view of Mesa Verde National Park, these extremely steep and rugged mountains have been closed to off-road vehicles. To protect these values, the public lands will be leased but with a no-surface occupancy stipulation. Operations proposed on the described lands will not be approved unless it is shown to BLM's Authorized Officer's satisfaction that the stipulation objective can still be met.

Cultural Areas

Stipulations beyond the standard lease form for oil and gas development are allowed in a no-surface occupancy (NSO) form for areas where significant surface values warrant complete avoidance. Several cultural resource sites and cultural resource districts in the San Juan Resource Area are of national significance and have been proposed for NSO stipulations (see Table 4-2). Many of these resources also have world-class significance, because they are similar in nature and scientific potential to those that lie in Mesa Verde National Park, now a World Heritage Park. Their status as significant sites is supported by their inclusion or potential inclusion to the National Register of Historic Places (NRHP). The 1966 Historic Preservation Act as amended, Executive Order 11593, and the 1979 Archaeological Resources Protection Act mandate that Federal agencies inventory, evaluate, protect, and enhance all cultural resources listed or eligible for listing on the NRHP. The major regulations that deal with determinations of site significance and site avoidance and(or) mitigation are contained in 36 CFR 60 and 36 CFR 800.

Criteria for determining NRHP eligibility are as follows: "The following criteria shall be used in evaluating properties for nomination to the National Register...and for evaluating National Register eligibility of properties affected by Federal agency undertakings.... The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

(a) That are associated with events that have made a significant contribution to the broad patterns of our history; or
(b) That are associated with the lives of persons significant in our past; or
(c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
(d) That have yielded, or may be likely to yield, information important in prehistory or history.

Table 4-2. Eligibility Criteria for Cultural Areas (for Placement on the National Register of Historic Places [NRHP]).*

Cultural Area	Criterion A Associated with events that made significant contributions to broad patterns of our history.	Criterion B Associated with lives of persons significant in our past.	Criterion C Embody characteristics of type, period, method of construction, or work of master; possess high artistic values; or represent significant, distinguishable entity whose components lack distinction.	Criterion D Have yielded or likely to yield important information in prehistory or history.
Battle Rock	Eligible			Eligible
Bull Canyon Rock Shelter			Eligible	Eligible
Cahone Canyon	Eligible		Eligible	Eligible
Cannonball Ruin			Nominated	Nominated
Cross Canyon and Cow Mesa	Eligible		Eligible	Eligible
Dolores Cave	Eligible			Eligible
Dominguez-Escalante Ruin	- - - - - - - - - (Currently listed on NRHP)- - - - - - -			
Easter Ruin			Eligible	Eligible
Indian Henry's Cabin		Eligible		
Lightning Tree Tower Group			Eligible	Eligible
Lowry Ruin & Association	- - - (Designated National Historic Landmark and listed on NRHP) - -			

Table 4-2. Eligibility Criteria for Cultural Areas (for Placement on the National Register of Historic Places [NRHP])--(Continued).*

Cultural Area	Criterion A Associated with events that made significant contributions to broad patterns of our history.	Criterion B Associated with lives of persons significant in our past.	Criterion C Embody characteristics of type, period, method of construction, or work of master; possess high artistic values; or represent significant, distinguishable entity whose components lack distinction.	Criterion D Have yielded or likely to yield important information in prehistory or history.
McLean Basin Towers			Nominated	Nominated
Painted Hand Petroglyphs			Eligible	Eligible
Painted Hand Ruin				Eligible
Sand and East Rock canyons	Nominated			Nominated
Seven Towers Ruin Group			Eligible	Eligible
Squaw/Papoose canyons	Eligible		Eligible	Eligible
Tabeguache Canyon & Tabeguache Cave II	Eligible			Eligible
Tabeguache Pueblo			Eligible	Eligible

*See narrative in this appendix for detailed description of these cultural areas.

These criteria have been used as part of the assessment of the significance of the sites and districts listed below where special and NSO stipulations are proposed in this plan (see Table 4-2 for site comparisons and criteria).

1. Sand/East Rock Canyons (5,880 acres). This area was nominated to the NRHP in 1977 but has not yet been acted upon. BLM's San Juan Resource Area Office has a copy of this nomination as submitted. The sites included in these canyons qualify for eligibility to the National Register under criteria (a) and (d). The information they may yield is related to the final Anasazi occupations. Many of the sites possess unique astronomical associations and pose defensive orientations. Special operating stipulations and NSO stipulations have been in effect in these canyons since they were proposed for protective withdrawal in 1972. Due to the topographically prohibitive nature of much of the canyon area, access has been limited and many of the significant cultural values remain minimally disturbed. Where vehicle access has occurred, site monitoring has revealed accelerated structural deterioration, erosion, and vandalism. The NSO stipulation will eliminate the detrimental effects of vehicle access into the area and maintain the integrity and association of the cultural values free from added intrusion and setting alteration. Under 43 CFR Public Land Order No. 6563 (effective August 22, 1984), Sand Canyon Archaeological Site (4,886 acres) was withdrawn from surface entry and mining to protect the archaeological values for 20 years (however, the lands will remain open to mineral leasing).

2. Cannonball Ruin (80 acres). This complex is currently withdrawn from all mineral entry and was recognized regionally and nationally as important in the archaeologic literature as early as 1919. Cannonball Ruin has been nominated to the NRHP, under criteria (c) and (d), as it is an established research site and is representative of the large canyon head pueblo-type complex. NSO stipulations are necessary to avoid direct physical damage to this ruin complex and significant scientific data loss.

3. Lowry Ruin & Associations (240 acres). This site is a National Historic Landmark, is currently listed on the NRHP, and is under a protective withdrawal. A NSO stipulation would continue to protect the site and its associated surroundings, which are also considered eligible to the NRHP under criteria (a), (c), and (d).

4. Dominguez-Escalante Ruins (40 acres). Escalante Ruin is listed on the NRHP and the Dominguez-Escalante complex (associated with the ruin) is in the process of formal eligibility determination. The area encompassing this complex is currently protected by an administrative withdrawal and is the site of the Anasazi Heritage Center to be completed in the fall of 1985. A NSO stipulation is in effect to protect the site.

5. Tabeguache Cave II and Tabeguache Canyon (560 acres). Tabeguache Cave II lies within Tabeguache Canyon, where research has contributed significant information about the prehistory of the area (criteria a and d). A high potential for such additional data at numerous sites within the canyon exists. The eligibility of this canyon to the NRHP has been evaluated and supported based on existing research data. A portion of the area has been proposed for status as an Outstanding Natural Area (ONA) and is confined topographically. There is currently no vehicle access into much of the canyon and, as a result, many sites remain in pristine condition. Occupancy of the canyon by oil and gas leasing operations and the associated access would destroy much of the scientific value of the sites within the canyon, their association, and their setting--all important values that qualify this district for National Register listing. A NSO stipulation is necessary to protect these values.

6. Dolores Cave (60 acres). This site has been researched and possesses data that make it eligible to the NRHP under criteria (a) and (d). The site has not been formally nominated due to both a lack of budget and personnel. A NSO stipulation will protect the shelter and immediate area from physical damage.

7. Bull Canyon Rockshelter (5 acres). This site has been evaluated and is considered eligible to the NRHP under criteria (c) and (d), evidencing a rare and important paleoindian occupation. A NSO stipulation will protect the physical remains of this site.

8. Tabeguache Pueblo (120 acres). Information gained from research done at this site (120 acres) qualifies it for NRHP listing under criteria (c) and (d). A NSO stipulation will protect the site and its immediate associations from intrusion and physical damage.

9. McLean Basin Towers (80 acres). This site has been proposed for nomination to the NRHP under criteria (c) and (d) and is currently under a protective withdrawal. A NSO stipulation continues to protect the site and immediate area from damage.

10. Squaw/Papoose and Cross/Cahone Canyons (23,400 acres). These areas, together with Cow Mesa, are topographically constrained areas of unique and nationally significant cultural values. A wide range of site types and prehistoric and historic uses are represented in these canyon and mesa habitats. Of the recorded sites in the canyon and Cow Mesa areas, more than 90 percent are considered eligible or potentially eligible under criteria (a), (c), and (d). Potentially eligible sites have surface indications of being significant, but final determination must be made by testing or excavation. The NSO stipulation proposed here would preserve the integrity and association of the Anasazi sites and cultural resource (prehistoric and historic) settings in the last remaining undisturbed canyons and mesa tops used by the Anasazi on public land in southwest Colorado. Analysis of the relationships between prehistoric sites and the progression of historic Euro-American and Native American sites in these canyons have immense scientific and public value. The absence or alteration of this setting and association will destroy many of the qualities that qualify them for NRHP listing.

11. Painted Hand Petroglyphs (120 acres). This site is considered eligible to the NRHP under criteria (c) and (d). It currently is protected from mineral entry by an administrative withdrawal. The NSO stipulation would preserve the site from disturbance and intrusion.

12. Painted Hand Ruin (80 acres). A NSO stipulation on this site is needed to protect its physical remains and relevant habitat. Painted Hand Ruin has been evaluated as eligible for the NRHP under criterion (d).

13. Indian Henry's Cabin (160 acres). This historic site is considered eligible to the NRHP under criterion (b). A NSO stipulation will protect the area occupied by this historic figure.

14. Lightning Tree Tower Group (160 acres). This interrelated complex of Anasazi sites has been evaluated as eligible for the NRHP under criteria (c) and (d). A NSO stipulation on this site complex will protect it from physical impacts and will also maintain its integrity.

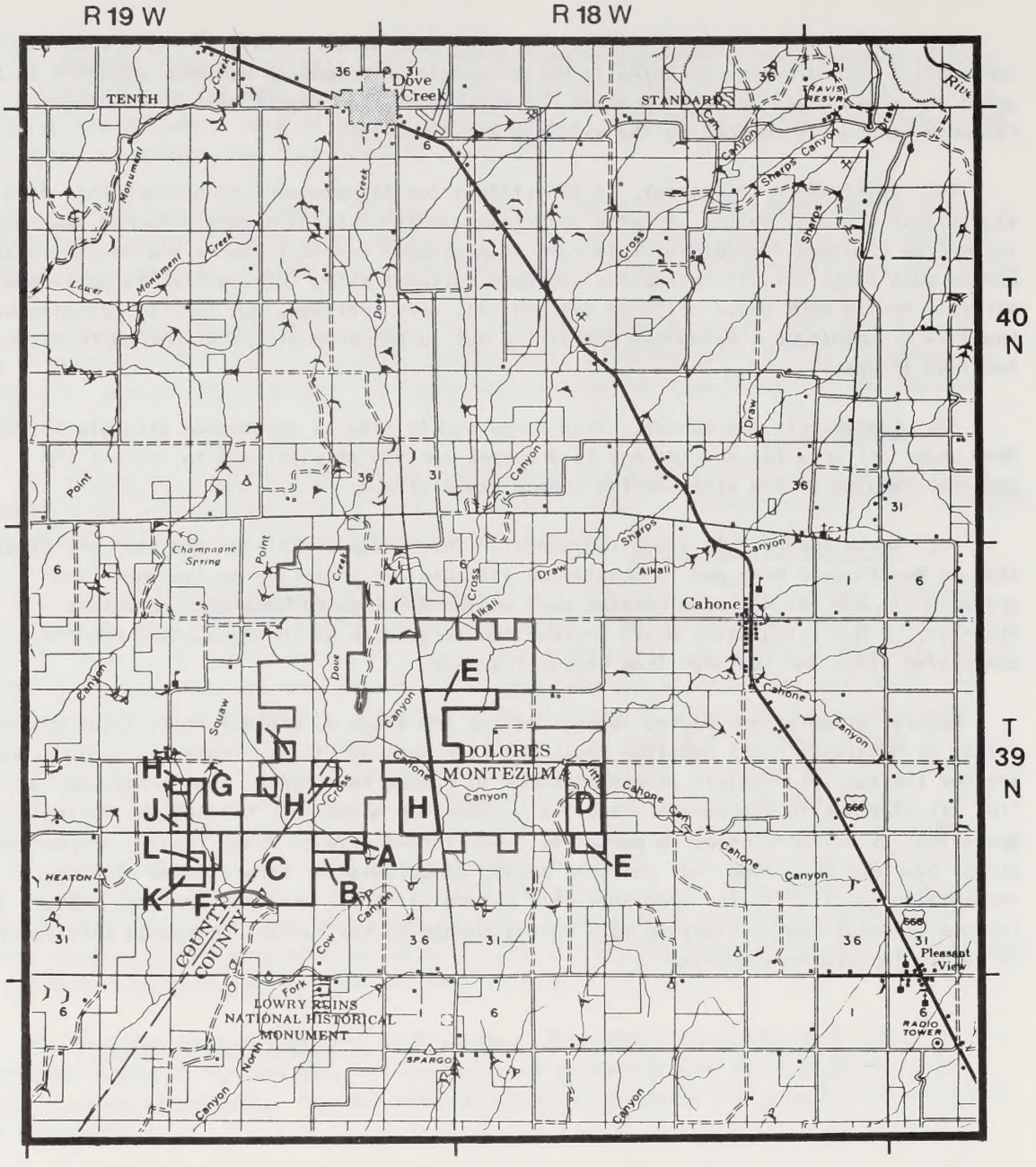
15. Buffer for Hovenweep National Monument (600 acres). This 1/4-mile wide corridor surrounding the Horseshoe House/Holly House segment of Hovenweep National Monument is proposed for a NSO stipulation to protect the setting of this significant archaeologic resource (currently managed by the National Park Service).

16. Battle Rock (40 acres). A NSO stipulation is necessary to protect this area of significant cultural value. A large sandstone monolith rising several hundred feet above the McElmo drainage floodplain, this rock is mentioned in local Apache and Navajo folklore and as such is an established Native American cultural site. Battle Rock is considered eligible to the NRHP under criteria (a) and (d). (In addition, BLM is also mandated by the 1979 Archaeological Resources Protection Act to preserve all sites sacred to Native American groups.)

17. Easter Ruin (80 acres). This large pueblo site is considered eligible to the NRHP under criteria (c) and (d) and is proposed for NSO stipulations to protect the physical remains of the site and its canyon associations.

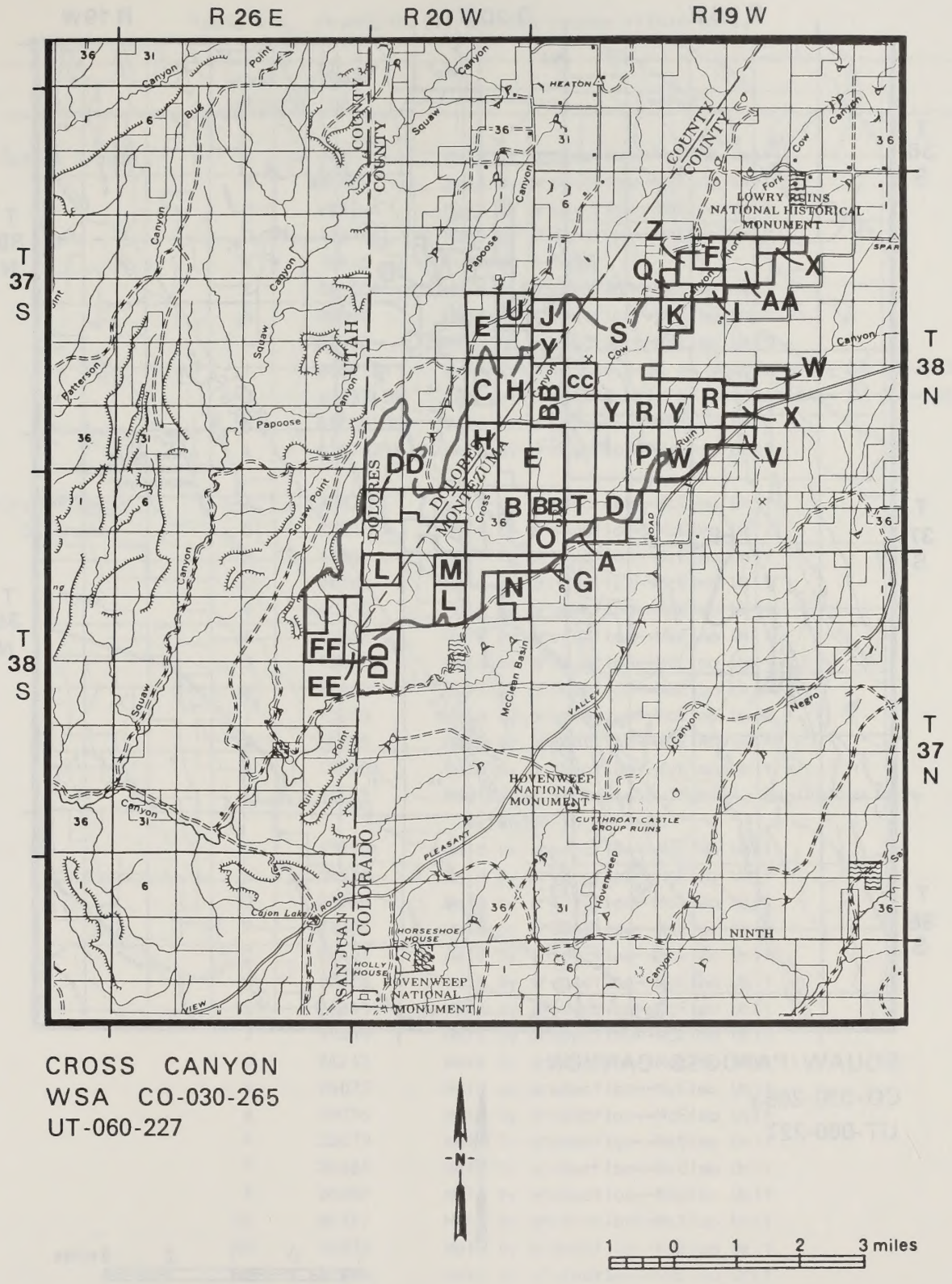
18. Seven Towers Ruin Group (40 acres). This group of related archaeologic sites lies on Mockingbird Mesa and is considered eligible for inclusion on the NRHP under criteria (c) and (d) and as a related part of the Mockingbird Mesa Archaeological District. A NSO stipulation would protect the large ruin at the canyonhead and its associated sites and features from physical damage.

Special stipulations may be imposed at the APD stage to protect significant cultural values on Mockingbird and Hamilton mesas and near Hanging Flume. These may include but are not limited to: vehicle access closures to reduce the impacts from vandalism, mitigation stipulations to discourage vandalism by operator personnel, intense monitoring of all operations by cultural resource personnel, restrictive site or areal fencing preventing access over and into important cultural areas, educational or interpretive signing, reclamation specific to the area that will return it to its original setting, and(or) more intense seasonal restrictions to both reduce damage to the cultural resource setting and to reduce impacts from access.

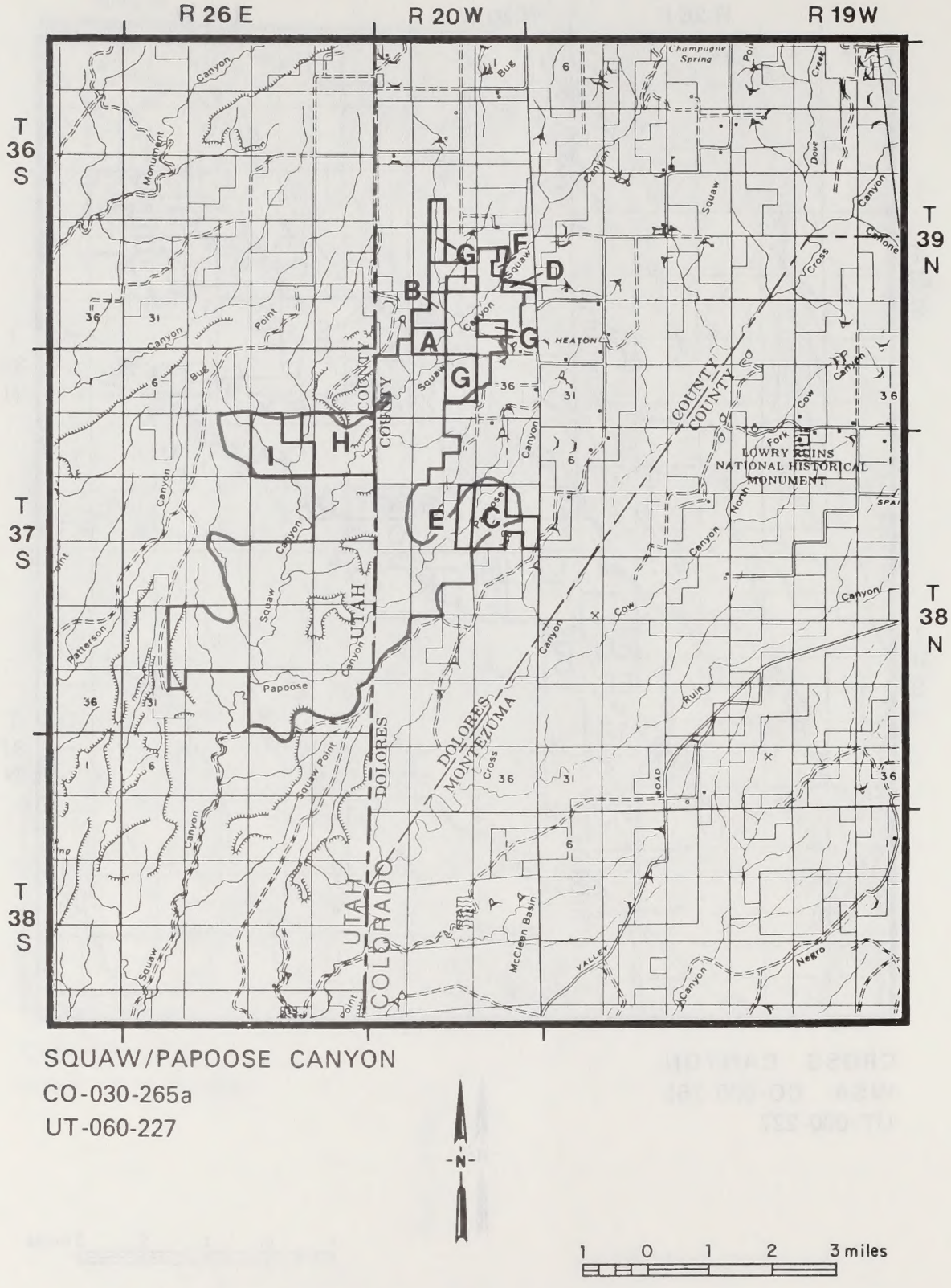


CAHONE CANYON
WSA CO-030-265d

Map 4-3. Current pre-FLPMA oil and gas leases within Cahone Canyon WSA (see Table 4-3 for corresponding lease numbers and status; BLM Data, August 1984).



Map 4-4. Current pre-FLPMA oil and gas leases within Cross Canyon WSA (see Table 4-3 for corresponding lease numbers and status; BLM Data, August 1984).



Map 4-5. Current pre-FLPMA oil and gas leases within Squaw/Papoose Canyon WSA (see Table 4-3 for corresponding lease numbers and status; BLM Data, August 1984).

Table 4-3. Pre-FLPMA Oil and Gas Leases within WSAs.*

WSA	Lease letter	Lease no.	Status
Cahone Canyon	A	9419	Held by production--McElmo Unit
	B	9895	Held by production--McElmo Unit
	C	9983-A	Held by production--McElmo Unit
	D	16975	Held by production--McElmo Unit
	E	18415	Expires 4-1-85
	F	19352	Held by production--McElmo Unit
	G	26008	Held by production--McElmo Unit
	H	28493	Held by production--McElmo Unit
	I	080773A	Communitized and held by production-- CA #SW-593
	J	0103715A	Communitized and held by production-- CA #SW-593
	K	0120610B	Held by production--McElmo Unit
	L	0127321A	Held by production--McElmo Unit
Cross Canyon	A	4042	Held by production--McElmo Unit
Colorado	B	4342	Held by production--McElmo Unit
	C	4696	Held by production--McElmo Unit
	D	9418	Held by production--McElmo Unit
	E	10110	Held by production--McElmo Unit
	F	11662	Held by production--McElmo Unit
	G	12049	Held by production--McElmo Unit
	H	12465	Held by production--McElmo Unit
	I	13895	Held by production--McElmo Unit
	J	14236	Held by production--McElmo Unit
	K	17620A	Held by production--McElmo Unit
	L	19355	Dedicated to Lease C-19355-A; Expiration date extended to 4-12-86
	M	19356	Held by production--McElmo Unit
	N	19478	Held by production--McElmo Unit
	O	22369	Held by production--McElmo Unit
	P	22370	Held by production--McElmo Unit
	Q	22491	Held by production--McElmo Unit
	R	22712	Held by production--McElmo Unit
	S	24213	Held by production--McElmo Unit
	T	24214	Held by production--McElmo Unit
	U	24217	Held by production--McElmo Unit
	V	26075	Held by production--McElmo Unit
	W	26076	Held by production--McElmo Unit
	X	26079	Held by production--McElmo Unit
	Y	26081	Held by production--McElmo Unit
	Z	26082	Held by production--McElmo Unit
	AA	26377	Held by production--McElmo Unit
	BB	26975	Held by production--McElmo Unit
	CC	26976	Held by production--McElmo Unit
	DD	27195	Segregated--extended to 4-12-86
Utah	EE	U19053A	Expires 4-12-86
	FF	U21273	Expires 4-12-86

Table 4-3. Pre-FLPMA Oil and Gas Leases within WSAs (continued).*

WSA	Lease letter	Lease no.	Status
Squaw/Papoose Ca	A	19357	Expires 10-31-85
Colorado	B	23549	Expires 3-1-86
	C	26973	Held by production--McElmo Unit
	D	26968	Communitized and held by production-- CA #CO-M-12
	E	27198	Expires 9-30-86
	F	0124747	Communitized and held by production-- CA #SW-683-- has new lease #36139, which is held by production--McElmo Unit
	G	36139	Lease held by production
Utah	H	U31480	Expires 2-22-86
	I	U24951	Expires 2-22-86

WSA	Lease no.	Status	Approximate location
Other WSAs**			
Dolores River Canyon	22422	Expires 4-30-85	T. 46 N., R. 18 W., Sections 11 and 12
McKenna Peak	--	None	
Menefee Mountain	--	None	
Tabeguache Creek	--	None	
Weber Mountain	4231	Lease held by production	T. 35 N., R. 14 W., Sections 12 and 13 T. 35 N., R. 13 W., Sections 7 and 18
	18401	Expires 5-31-85	T. 35 N., R. 14 W., Section 25
	18402	Lease held by production	T. 35 N., R. 14 W., Section 24
	23819	Expires 6-30-86	T. 35 N., R. 13 W., Section 8

* See Maps 4-3 through 4-5 preceding Table 4-3 for approximate locations of these leases within the WSAs.
**These leases were not plotted because of their small numbers.
Source: BLM Data as of August 16, 1984.

Form 3100-11*
(March 1984)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0008
Expires January 31, 1986

Serial No.

OFFER TO LEASE AND LEASE FOR OIL AND GAS

The undersigned (reverse) offers to lease all or any of the lands in item 2 that are available for lease pursuant to the Mineral Leasing Act of 1920 (30 U.S.C. 181 et seq.), the Mineral Leasing Act for Acquired Lands (30 U.S.C. 351-359), the Attorney General's Opinion of April 2, 1941 (40 OP. Atty. Gen. 41), or the

Read Instructions Before Completing

1. Name

   Street

   City, State, Zip Code

2. This offer/lease is for: (Check Only One) ☐ PUBLIC DOMAIN LANDS ☐ ACQUIRED LANDS (percent U.S. interest _____)

   Surface managing agency if other than BLM: _____ Unit/Project _____

   Legal description of land requested:

T.	R.	Meridian	State	County

Total acres applied for _____

Amount remitted: Filing fee $ _____ Rental fee $ _____ Total $ _____

DO NOT WRITE BELOW THIS LINE

3. Land included in lease:

T.	R.	Meridian	State	County

Total acres in lease _____

Rental retained $ _____

In accordance with the above offer, or the previously submitted simultaneous oil and gas lease application or competitive bid, this lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (except helium) in the lands described in item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

Type and primary term of lease:

☐ Simultaneous noncompetitive lease (ten years)

☐ Regular noncompetitive lease (ten years)

☐ Competitive lease (five years)

☐ Other _____

THE UNITED STATES OF AMERICA

by _____
(Signing Officer)

_____ (Title) _____ (Date)

EFFECTIVE DATE OF LEASE _____

*(Formerly 3110-1, 2, 3, 3120-1, 7, 3130-4, 5, and 7)

4. (a) Undersigned certifies that (1) offeror is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or Territory thereof; (2) all parties holding an interest in the offer are in compliance with 43 CFR 3100 and the leasing authorities; (3) offeror's chargeable interests, direct and indirect, in either public domain or acquired lands do not exceed 200,000 acres in oil and gas options or 246,080 acres in options and leases in the same State, or 300,000 acres in leases and 200,000 acres in options in either leasing District in Alaska; and (4) offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located.

(b) Undersigned agrees that signature to this offer constitutes acceptance of this lease, including all terms, conditions, and stipulations of which offeror has been given notice, and any amendment or separate lease that may include any land described in this offer open to leasing at the time this offer was filed but omitted for any reason from this lease. The offeror further agrees that this offer cannot be withdrawn, either in whole or part, unless the withdrawal is received by the BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford offeror no priority if it is not properly completed and executed in accordance with the regulations, or if it is not accompanied by the required payments. 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Duly executed this _____ day of _____, 19 _____. _____

(Signature of Lessee or Attorney-in-fact)

LEASE TERMS

Sec. 1. Rentals—Rentals shall be paid to proper office of lessor in advance of each lease year. Annual rental rates per acre or fraction thereof are:

(a) Simultaneous noncompetitive lease, $1.00 for the first 5 years, thereafter, $3.00;
(b) Regular noncompetitive lease, $1.00;
(c) Competitive lease, $2.00; or
(d) Other, see attachment.

If all or part of a noncompetitive leasehold is determined to be within a known geological structure or a favorable petroleum geological province, annual rental shall become $2.00, beginning with the lease year following notice of such determination. However, a lease that would otherwise be subject to rental of more than $2.00 shall continue to be subject to the higher rental.

If this lease or a portion thereof is committed to an approved cooperative or unit plan which includes a well capable of producing leased resources, and the plan contains a provision for allocation of production, royalties shall be paid on the production allocated to this lease. However, annual rentals shall continue to be due at the rate specified in (a), (b), (c), or (d) for those lands not within a participating area.

Failure to pay annual rental, if due, on or before the anniversary date of this lease (or next official working day if office is closed) shall automatically terminate this lease by operation of law. Rentals may be waived, reduced, or suspended by the Secretary upon a sufficient showing by lessee.

Sec. 2. Royalties—Royalties shall be paid to proper office of lessor. Royalties shall be computed in accordance with regulations on production removed or sold. Royalty rates are:

(a) Simultaneous noncompetitive lease, 12½%;
(b) Regular noncompetitive lease, 12½%;
(c) Competitive lease, see attachment; or
(d) Other, see attachment.

Lessor reserves the right to specify whether royalty is to be paid in value or in kind, and the right to establish reasonable minimum values on products after giving lessee notice and an opportunity to be heard. When paid in value, royalties shall be due and payable on the last day of the month following the month in which production occurred. When paid in kind, production shall be delivered, unless otherwise agreed to by lessor, in merchantable condition on the premises where produced without cost to lessor. Lessee shall not be required to hold such production in storage beyond the last day of the month following the month in which production occurred, nor shall lessee be held liable for loss or destruction of royalty oil or other products in storage from causes beyond the reasonable control of lessee.

Minimum royalty shall be due for any lease year after discovery in which royalty payments aggregate less than $1.00 per acre. Lessee shall pay such difference at end of lease year. This minimum royalty may be waived, suspended, or reduced, and the above royalty rates may be reduced, for all or portions of this lease if the Secretary determines that such action is necessary to encourage the greatest ultimate recovery of the leased resources, or is otherwise justified.

An interest charge shall be assessed on late royalty payments or underpayments in accordance with the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA) (96 Stat. 2447). Lessee shall be liable for royalty payments on oil and gas lost or wasted from a lease site when such loss or waste is due to negligence on the part of the operator, or due to the failure to comply with any rule, regulation, order, or citation issued under FOGRMA or the leasing authority.

Sec. 3. Bonds—Lessee shall file and maintain any bond required under regulations.

Sec. 4. Diligence, rate of development, unitization, and drainage—Lessee shall exercise reasonable diligence in developing and producing, and shall prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves right to specify rates of development and production in the public interest and to require lessee to subscribe to a cooperative or unit plan, within 30 days of notice, if deemed necessary for proper development and operation of area, field, or pool embracing these leased lands. Lessee shall drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in amount determined by lessor.

Sec. 5. Documents, evidence, and inspection—Lessee shall file with proper office of lessor, not later than 30 days after effective date thereof, any contract or evidence of other arrangement for sale or disposal of production. At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing amounts and quality of all products removed and sold, proceeds therefrom, and amount used for production purposes or unavoidably lost. Lessee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest, expenditures, and depreciation costs. In the form prescribed by lessor, lessee shall keep a daily drilling record, a log, information on well surveys and tests, and a record of subsurface investigations and furnish copies to lessor when required. Lessee shall keep open at all reasonable times for inspection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the leased lands. Lessee shall maintain copies of all contracts, sales agreements, accounting records, and documentation such as billings, invoices, or similar documentation that supports costs claimed as manufacturing, preparation, and/or transportation costs. All such records shall be maintained in lessee's accounting offices for future audit by lessor. Lessee shall maintain required records for 6 years after they are generated or, if an audit or investigation is underway, until released of the obligation to maintain such records by lessor.

During existence of this lease, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

Sec. 6. Conduct of operations—Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-ways. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects.

Sec. 7. Mining operations—To the extent that impacts from mining operations would be substantially different or greater than those associated with normal drilling operations, lessor reserves the right to deny approval of such operations.

Sec. 8. Extraction of helium—Lessor reserves the option of extracting or having extracted helium from gas production in a manner specified and by means provided by lessor at no expense or loss to lessee or owner of the gas. Lessee shall include in any contract or sale of gas the provisions of this section.

Sec. 9. Damages to property—Lessee shall pay lessor for damage to lessor's improvements, and shall save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

Sec. 10. Protection of diverse interests and equal opportunity—Lessee shall: pay when due all taxes legally assessed and levied under laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at least twice each month in lawful money of the United States; maintain a safe working environment in accordance with standard industry practices; and take measures necessary to protect the health and safety of the public.

Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. If lessee operates a pipeline, or owns controlling interest in a pipeline or a company operating a pipeline, which may be operated accessible to oil derived from these leased lands, lessee shall comply with section 28 of the Mineral Leasing Act of 1920.

Lessee shall comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessee nor lessee's subcontractors shall maintain segregated facilities.

Sec. 11. Transfer of lease interests and relinquishment of lease—As required by regulations, lessee shall file with lessor any assignment or other transfer of an interest in this lease. Lessee may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which shall be effective as of the date of filing, subject to the continued obligation of the lessee and surety to pay all accrued rentals and royalties.

Sec. 12. Delivery of premises—At such time as all or portions of this lease are returned to lessor, lessee shall place affected wells in condition for suspension or abandonment, reclaim the land as specified by lessor and, within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells.

Sec. 13. Proceedings in case of default—If lessee fails to comply with any provisions of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation. Lessee shall also be subject to applicable provisions and penalties of FOGRMA (96 Stat. 2447). However, if this lease includes land known to contain valuable deposits of leased resources, it may be cancelled only by judicial proceedings. This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver shall not prevent later cancellation for the same default occurring at any other time.

Sec. 14. Heirs and successors-in-interest—Each obligation of this lease shall extend to and be binding upon, and every benefit hereof shall inure to the heirs, executors, administrators, successors, beneficiaries, or assignees of the respective parties hereto.

Form 3400-12
(April 1984)
(Formerly 3520-1)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Serial Number

COAL LEASE

PART I. LEASE RIGHTS GRANTED

This lease, entered into by and between the UNITED STATES OF AMERICA, hereinafter called lessor, through the Bureau of Land Management, and *(Name and Address)*

hereinafter called lessee, is effective *(date)* , for a period of 20 years and for so long thereafter as coal is produced in commercial quantities from the leased lands, subject to readjustment of lease terms at the end of the 20th lease year and each 10-year period thereafter.

Sec. 1. This lease is issued pursuant and subject to the terms and provisions of the:

☐ Mineral Lands Leasing Act of 1920, Act of February 25, 1920, as amended, 41 Stat. 437, 30 U.S.C. 181-287, hereinafter referred to as the Act;

☐ Mineral Leasing Act for Acquired Lands, Act of August 7, 1947, 61 Stat. 913, 30 U.S.C. 351-359;

and to the regulations and formal orders of the Secretary of the Interior which are now or hereafter in force, when not inconsistent with the express and specific provisions herein.

Sec. 2. Lessor, in consideration of any bonuses, rents, and royalties to be paid, and the conditions and covenants to be observed as herein set forth, hereby grants and leases to lessee the exclusive right and privilege to drill for, mine, extract, remove, or otherwise process and dispose of the coal deposits in, upon, or under the following described lands:

containing acres, more or less, together with the right to construct such works, buildings, plants, structures, equipment and appliances and the right to use such on-lease rights-of-way which may be necessary and convenient in the exercise of the rights and privileges granted, subject to the conditions herein provided.

PART II. TERMS AND CONDITIONS

Sec. 1. (a) RENTAL RATE - Lessee shall pay lessor rental annually and in advance for each acre or fraction thereof during the continuance of the lease at the rate of $ for each lease year.

(b) RENTAL CREDITS - Rental shall not be credited against either production or advance royalties for any year.

Sec. 2. (a) PRODUCTION ROYALTIES - The royalty shall be percent of the value of the coal as set forth in the regulations. Royalties are due to lessor the final day of the month succeeding the calendar month in which the royalty obligation accrues.

(b) ADVANCE ROYALTIES - Upon request by the lessee, the authorized officer may accept, for a total of not more than 10 years, the payment of advance royalties in lieu of continued operation, consistent with the regulations. The advance royalty shall be based on a percent of the value of a minimum number of tons determined in the manner established by the advance royalty regulations in effect at the time the lessee requests approval to pay advance royalties in lieu of continued operation.

Sec. 3. BONDS - Lessee shall maintain in the proper office a lease bond in the amount of $. The authorized officer may require an increase in this amount when additional coverage is determined appropriate.

Sec. 4. DILIGENCE - This lease is subject to the conditions of diligent development and continued operation, except that these conditions are excused when operations under the lease are interrupted by strikes, the elements, or casualties not attributable to the lessee. The lessor, in the public interest, may suspend the condition of continued operation upon payment of advance royalties in accordance with the regulations in existence at the time of the suspension. Lessee's failure to produce coal in commercial quantities at the end of 10 years shall terminate the lease. Lessee shall submit an operation and reclamation plan pursuant to Section 7 of the Act not later than 3 years after lease issuance.

The lessor reserves the power to assent to or order the suspension of the terms and conditions of this lease in accordance with, inter alia, Section 39 of the Mineral Leasing Act, 30 U.S.C. 209.

Sec. 5. LOGICAL MINING UNIT (LMU) - Either upon approval by the lessor of the lessee's application or at the direction of the lessor, this lease shall become an LMU or part of an LMU, subject to the provisions set forth in the regulations.

The stipulations established in an LMU approval in effect at the time of LMU approval will supersede the relevant inconsistent terms of this lease so long as the lease remains committed to the LMU. If the LMU of which this lease is a part is dissolved, the lease shall then be subject to the lease terms which would have been applied if the lease had not been included in an LMU.

Sec. 6. DOCUMENTS, EVIDENCE AND INSPECTION - At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing the amounts and quality of all products removed and sold from the lease, the proceeds therefrom, and the amount used for production purposes or unavoidably lost.

Lessee shall keep open at all reasonable times for the inspection of any duly authorized officer of lessor, the leased premises and all surface and underground improvements, works, machinery, ore stockpiles, equipment, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or under the leased lands.

Lessee shall allow lessor access to and copying of documents reasonably necessary to verify lessee compliance with terms and conditions of the lease.

While this lease remains in effect, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

Sec. 7. DAMAGES TO PROPERTY AND CONDUCT OF OPERATIONS - Lessee shall comply at its own expense with all reasonable orders of the Secretary, respecting diligent operations, prevention of waste, and protection of other resources.

Lessee shall not conduct exploration operations, other than casual use, without an approved exploration plan. All exploration plans prior to the commencement of mining operations within an approved mining permit area shall be submitted to the authorized officer.

Lessee shall carry on all operations in accordance with approved methods and practices as provided in the operating regulations, having due regard for the prevention of injury to life, health, or property, and prevention of waste, damage or degradation to any land, air, water, cultural, biological, visual, and other resources, including mineral deposits and formations of mineral deposits not leased hereunder, and to other land uses or users. Lessee shall take measures deemed necessary by lessor to accomplish the intent of this lease term. Such measures may include, but are not limited to, modification to proposed siting or design of facilities, timing of operations, and specification of interim and final reclamation procedures. Lessor reserves to itself the right to lease, sell, or otherwise dispose of the surface or other mineral deposits in the lands and the right to continue existing uses and to authorize future uses upon or in the leased lands, including issuing leases for mineral deposits not covered hereunder and approving easements or rights-of-way. Lessor shall condition such uses to prevent unnecessary or unreasonable interference with rights of lessee as may be consistent with concepts of multiple use and multiple mineral development.

Sec. 8. PROTECTION OF DIVERSE INTERESTS, AND EQUAL OPPORTUNITY - Lessee shall: pay when due all taxes legally assessed and levied under the laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at lease twice each month in lawful money of the United States; maintain a safe working environment in accordance with standard industry practices; restrict the workday to not more than 8 hours in any one day for underground workers, except in emergencies; and take measures necessary to protect the health and safety of the public. No person under the age of 16 years shall be employed in any mine below the surface. To the extent that laws of the State in which the lands are situated are more restrictive than the provisions in this paragraph, then the State laws apply.

Lessee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and the rules, regulations, and relevant orders of the Secretary of Labor. Neither lessee nor lessee's subcontractors shall maintain segregated facilities.

Sec. 9. (a) TRANSFERS

- ☐ This lease may be transferred in whole or in part to any person, association or corporation qualified to hold such lease interest.
- ☐ This lease may be transferred in whole or in part to another public body or to a person who will mine the coal on behalf of, and for the use of, the public body or to a person who for the limited purpose of creating a security interest in favor of a lender agrees to be obligated to mine the coal on behalf of the public body.
- ☐ This lease may only be transferred in whole or in part to another small business qualified under 13 CFR 121.

Transfers of record title, working or royalty interest *must* be approved in accordance with the regulations.

(b) RELINQUISHMENT - The lessee may relinquish in writing at any time all rights under this lease or any portion thereof as provided in the regulations. Upon lessor's acceptance of the relinquishment, lessee shall be relieved of all future obligations under the lease or the relinquished portion thereof, whichever is applicable.

Sec. 10. DELIVERY OF PREMISES, REMOVAL OF MACHINERY, EQUIPMENT, ETC. - At such time as all portions of this lease are returned to lessor, lessee shall deliver up to lessor the land leased, underground timbering, and such other supports and structures necessary for the preservation of the mine workings on the leased premises or deposits and place all workings in condition for suspension or abandonment. Within 180 days thereof, lessee shall remove from the premises all other structures, machinery, equipment, tools, and materials that it elects to or as required by the authorized officer. Any such structures, machinery, equipment, tools, and materials remaining on the leased lands beyond 180 days, or approved extension thereof, shall become the property of the lessor, but lessee shall either remove any or all such property or shall continue to be liable for the cost of removal and disposal in the amount actually incurred by the lessor. If the surface is owned by third parties, lessor shall waive the requirement for removal, provided the third parties do not object to such waiver. Lessee shall, prior to the termination of bond liability or at any other time when required and in accordance with all applicable laws and regulations, reclaim all lands the surface of which has been disturbed, dispose of all debris or solid waste, repair the offsite and onsite damage caused by lessee's activity or activities incidental thereto, and reclaim access roads or trails.

Sec. 11. PROCEEDINGS IN CASE OF DEFAULT - If lessee fails to comply with applicable laws, existing regulations, or the terms, conditions and stipulations of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation by the lessor only by judicial proceedings. This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver shall not prevent later cancellation for the same default occurring at any other time.

Sec. 12. HEIRS AND SUCCESSORS-IN-INTEREST - Each obligation of this lease shall extend to and be binding upon, and every benefit hereof shall inure to, the heirs, executors, administrators, successors, or assigns of the respective parties hereto.

Sec. 13. INDEMNIFICATION - Lessee shall indemnify and hold harmless the United States from any and all claims arising out of the lessee's activities and operations under this lease.

Sec. 14. SPECIAL STATUTES - This lease is subject to the Federal Water Pollution Control Act (33 U.S.C. 1151—1175), the Clean Air Act (42 U.S.C. 1857 et. seq.), and to all other applicable laws pertaining to exploration activities, mining operations and reclamation, including the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201 et. seq.).

Sec. 15. SPECIAL STIPULATIONS -

Sec. 15. SPECIAL STIPULATIONS (Cont'd.) -

THE UNITED STATES OF AMERICA

By

Company or Lessee Name

(Signature of Lessee) (Signing Officer)

(Title) (Title)

(Date) (Date)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

This form does not constitute an information collection as defined by 44 U.S.C. 3502 and therefore does not require OMB approval.

APPENDIX FIVE

SAN JUAN/SAN MIGUEL RESOURCE MANAGEMENT PLAN
EMPHASIS AREAS/MANAGEMENT GUIDANCE

Introduction

The San Juan/San Miguel Resource Management Plan (RMP) defines the long-term direction for managing the public lands and minerals within the planning area. The RMP also defines the overall direction and required activities to achieve the desired resource conditions and is composed of two principle parts: (a) multiple use emphasis areas that describe the various management practices and guidelines to be used in administering the public lands and minerals, and (b) a resource management map that shows the various emhasis areas and boundaries for future management (this will be printed as part of the Final Plan). Table 5-1 was developed in response to public issues and management concerns and how available, suitable, and capable the land and its resources are.

Implementing this land use plan is the key to translating the goals, management practices, and guidelines stated in the plan into on-the-ground results. It will be put into effect through budgeting and annual work plan processes, which supplement the land use plan by making the adjustments needed to reflect current priorities within the overall plan direction.

Through the annual work plan process, money will be placed in priority order to accomplish tasks needed to implement the land use plan's goals, practices, and guidelines. The implementation will generally require more detailed activity planning prior to actual on-the-ground actions. Many of the activity planning actions will be subject to detailed environmental assessments (EAs; not written for projects adequately covered in the RMP/EIS) and resultant decisions; the plan will also be used as direction for these future actions.

Table 5-1 was written the fall of 1983 before the BLM and USFS land exchange bill was passed (PL 98-141, October 31, 1983). Thus, some of the land now under the U.S. Forest Service's jurisdiction is discussed under BLM's land use planning process (see Appendix 1 for land exchange details).

Implementation

Table 5-1 consists of direction concerning activities needed to implement the goals and objectives of the particular emphasis area. Specific limits and constraints may be defined within emphasis areas to ensure objectives are achieved.

Land use planning is not a process whereby every possible future use of the public land can be forecast and taken into account in an RMP. However, the emphasis areas can be used to determine compatibility with possible future uses of the public land and minerals. For example, as possible future uses arise, they will be compared to the management emphasis on a given area and relative compatibility will be determined; if the uses are compatible, they would be allowed.

Uses that were found to be incompatible could require any of the following actions: (1) land use plan amendments, (2) mitigation to bring the uses within the goals and objectives of the emphasis area, and (3) relocation to another area where the proposed uses would be compatible with the given emphasis for the area.

This land use plan will be used as direction for decisions made in the immediate future in the planning area. When necessary, revisions will be completed based upon monitoring and evaluation, new data, new or revised policy, and changes in circumstances affecting the entire or major portions of the plan. Revisions will comply with all of the requirements of these regulations for preparing and approving the original RMP.

Table 5-1. Management Guidance for Emphasis Areas.

Management Guidance for Area A: Emphasis on Livestock Management

Management direction will emphasize increasing forage and livestock production on a sustained yield basis. Emphasis is upon increasing forage, red meat and animal fiber production and improving forage composition and watershed conditions. Significant investments may be made in livestock improvements which will be multiple use oriented (i.e., wildlife, watershed, etc.). Investments for other resources will be minimal, although resource management activities compatible with livestock production will continue. Dispersed recreation opportunities will continue. Woodland products and timber will be made available. Wildlife habitat development generally will not be emphasized. Fire will be utilized to enhance forage production.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Protect & manage important cultural resource properties.				
Recreation	Manage for dispersed recreation as the primary recreation activity. Permit yearlong, non-motorized recreation activities throughout the area. Allow motorized, off-road vehicle (ORV) use. Establish site-specific visual quality objectives & design guidelines for landscape development projects during activity planning.				
Wildlife	Maintain or improve wildlife habitat through interdisciplinary design of range improvement projects & diversity of native vegetation types. Allow compatible wildlife introductions or reintroductions or habitat improvements. Limit investments of wildlife program funds unless opportunity for substantial benefits to wildlife resources can be realized. Aquatic/riparian resources will receive special consideration at the activity planning stage to insure maintenance or improvement of these resources.		All perennial streams within the planning area that have the potential of providing quality fisheries & (or) riparian habitat (approx. 400 mi have been identified) should receive special management consideration through the activity planning process & monitoring systems to maintain, improve, or enhance resource conditions associated with aquatic/riparian habitat.	All perennial streams within the planning area that have the potential of providing quality fisheries & (or) riparian habitat (approx. 400 mi have been identified) should receive special management consideration through the activity planning process & monitoring systems to maintain, improve, or enhance resource conditions associated with aquatic/ riparian habitat.	All perennial streams within the planning area that have the potential of providing quality fisheries & (or) riparian habitat (approx. 400 mi have been identified) should receive special management consideration through the activity planning process & monitoring systems to maintain, improve, or enhance resource conditions associated with aquatic/ riparian habitat.
			Allow Colorado Division of Wildlife (CDOW) to introduce chukar & expand the pronghorn antelope herds. In all vegetation types, 20% of the existing vegetation should be maintained interspersed throughout the project areas to maintain dispersed ecologic communities for wildlife.	Allow CDOW to introduce chukar & expand the pronghorn antelope herds. In all vegetation types, 4% of the existing vegetation should be maintained interspersed throughout the	Allow CDOW to introduce chukar & expand the pronghorn antelope herds. Other game species would be allowed if site-specific analysis indicates that significant conflicts with

Resource/ Activity	General Guidance	Specific Management Direction: Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Wildlife (continued)				project areas to maintain dispersed ecologic communities for wildlife.	livestock will not occur. In all vegetation types, 5% to 15% of the existing vegetation should be maintained interspersed throughout the project areas to maintain dispersed, ecologic communities for wildlife.
Livestock Management	Manage suitable vegetation types for increased, sustained livestock production. One goal is to improve range condition & productivity on native rangeland. Use improved management systems such as rest-rotation & deferred-rotation, if appropriate. Invest in range improvements necessary to implement management systems.	Continue current management on the 11 Allotment Management Plans (AMPs; 304,000 acres).	Develop 53 AMPs (694,000 acres).	Develop 109 AMPs (850,000 acres).	Develop 71 AMPs (810,000 acres).
Forestry	Manage woodland products & timber to enhance range resources & for insect & disease control.		Provide reasonable opportunity to salvage forest products prior to & following range habitat improvement treatments.	Provide reasonable opportunity to salvage forest products prior to & following range habitat improvement treatments.	Provide reasonable opportunity to salvage forest products prior to & following range habitat improvement treatments.
	Timber species should be managed at a stocking level that maintains moderate to high herbage production. Utilize woodland products to the maximum extent practicable through commercial sales. Manage aspen forest types to perpetuate aspen, using even-aged silviculture. Limit clearcuts in aspen to a maximum of 40 acres or the size of an aspen clone, whichever is smaller.		Provide legal & physical access to vegetation treatments to facilitate salvage of forest products when feasible.	Provide legal & physical access to vegetation treatments to facilitate salvage of forest products when feasible.	Provide legal & physical access to vegetation treatments to facilitate salvage of forest products when feasible.
Minerals	Allow mineral development in all areas not withdrawn from entry. Provide protective stipulations to limit impacts to livestock improvements or management practices.				

Resource/ Activity	General Guidance	Specific Management Direction: Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Lands	Allow for disposal of parcels of public land that do not significantly affect livestock management. Major utility corridors would be allowed with protective stipulations to prevent or limit impacts to range management. Allow other land actions, when there is a clear & significant public need, when they will result in minimal adverse impacts, or when they will be beneficial to grazing management. Acquire or exchange lands when livestock management opportunities will be enhanced.				
Soils and Water	Maintain soil productivity, minimize man-caused soil erosion and strive to achieve adequate vegetation cover for watershed protection and plant vigor. Maintain water quality and quantity for multiple resource management. Secure sufficient water rights to provide for livestock management needs.				
Fire	Provide level of protection from wildfire that will result in least total cost & will generally enhance range management values. Use prescribed fire when possible to enhance forage production.		Continue & expand (where appropriate) the limited fire suppression plan to enhance vegetation conditions for livestock grazing.	Continue & expand (where appropriate) the limited fire suppression plan to enhance vegetation conditions for livestock grazing.	Continue & expand (where appropriate) the limited fire suppression plan to enhance vegetation conditions for livestock grazing.
Access	Provide administrative access to public land to enhance management of the range resource. Provide maintenance of roads in the BLM transportation plan to minimum standards for user safety.				Acquire access to the following grazing allotments: 7016, 8011, 8013, 8018, & 8019.

Management Guidance for Area B: Emphasis on Wildlife

Management direction will emphasize achieving and maintaining the best possible habitat conditions for fisheries and wildlife. Emphasis will be upon increasing aquatic and terrestrial wildlife numbers within habitat capability, improving stream and watershed conditions and providing a high degree of vegetation diversity. Investments for wildlife habitat improvements could be high in certain areas. Woodland products and timber will be available. Dispersed recreation opportunities will continue. Livestock management will be of an intensity that will utilize available forage and maintain forage vigor while not degrading wildlife habitat. The number or season-of-use for livestock may be reduced in some areas.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Protect and manage important cultural resource properties.				
Recreation	Manage for dispersed recreation as the primary recreation activity. Permit yearlong, non-motorized recreationactivities throughout the area, except restrict recreation use to resolve people and wildlife conflicts, favoring wildlife in such cases. Establish site-specific visual quality objectives and design guidelines for landscape development projects during activity planning.	Continue vehicle closure on Perins Peak area. Continue seasonal (April 1-July 15) closure to public access at Perins Peak Peregrine Falcon Eyrie.	Continue vehicle closure on Perins Peak area. Continue seasonal (April 1-July 15) closure to public access at Perins Peak Peregrine Falcon Eyrie.	Continue vehicle closure on Perins Peak area. Continue seasonal (April 1-July 15) closure to public access at Perins Peak Peregrine Falcon Eyrie.	Continue vehicle closure on Perins Peak and Animas Mountain area. Continue seasonal (April 1-July 15) closure to public access at Perins Peak Peregrine Falcon Eyrie.
Wildlife	Intensively manage for optimal terrestrial & aquatic/riparian wildlife habitat. Maintain or improve historically occupied or potentially suitable threatened & endangered (T&E) species habitat. Maintain or improve habitat for sensitive plant & wildlife species & "migratory bird species of high Federal interest." Provide for necessary investments to enhance wildlife habitat. Cooperate with CDOW for funding of habitat improvement projects & also cooperate with CDOW on the reintroduction program.	**Terrestrial** Continue current management of the following big game animals: 20,000 mule deer 1,600 elk 175 antelope Continue management of Perins Peak & Paradox peregrine falcon eyries. Continue management of bald eagle nests & winter eagle concentration areas. Animas Mountain should be managed for its wildlife values (winter range) & maintained in a primitive state.	**Terrestrial** Manage big game for the following numbers of animals: 20,000 mule deer 1,600 elk 300 antelope 300 bighorn sheep Continue management of Perins Peak & Paradox peregrine falcon eyries. Maintain existing management of bald eagle nests & expand areas recognized as winter eagle concentration areas. Animas Mountain should be managed for its wildlife values (winter range) & maintained in a primitive state.	**Terrestrial** Manage big game for the following numbers of animals: 24,000 mule deer 3,000 elk 500 antelope 500 bighorn sheep Continue management of Perins Peak & Paradox peregrine falcon eyries. Continue management of bald eagle nests & winter eagle concentration areas. Animas Mountain should be managed for its wildlife values (winter range) & maintained in a primitive state.	**Terrestrial** Manage big game for the following numbers of animals, subject to monitoring results & availability of funds & personnel to implement needed improvements): 20,000 mule deer 1,600 elk 300 antelope 300 bighorn sheep Continue management of Perins Peak & Paradox peregrine falcon eyries. Continue management of bald eagle nests & winter eagle concentration areas. Animas Mountain should be managed for its wildlife values (winter range) & maintained in a primitive state.

Area B (continued)

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Wildlife (continued)		Continue management of the McElmo Rare Snake & Lizard Research Natural Area. Complete habitat improvements (approx. $200,000).	Complete habitat improvements (approx. $519,000).	Complete necessary habitat improvements to meet forage needs (approx. $1 million).	Complete habitat improvements (approx. $529,000). Invest wildlife funds for structural improvements & vegetation restoration projects to improve high priority riparian habitat at the following drainages: Roc, North & South Mesa, La Sal, & Dry creeks (East & West Fork, Dry Creek Canyon) & Cross, Cow, Cahone, Hovenweep, & Bridge canyons. Continue to monitor & provide protection for endangered candidate and sensitive plant species in Paradox Valley and Spring Creek.
		Aquatic/Riparian	Aquatic/Riparian	Aquatic/Riparian	Aquatic/Riparian
		Maintain aquatic/riparian habitat on an estimated 400 miles of stream. (Consider improvements only as time & manpower allow.)	Reestablish river otters in the Dolores River. Improve or enhance aquatic/ riparian habitat on the following priority areas: - Upper San Miguel River & its tributaries (39 miles) - Upper Dolores River (11 miles) - Lower San Miguel River & its tributaries (67 miles) - Animas River drainage (24 miles) - Lower Dolores River & its tributaries (53 miles) - SW quadrant streams (55 miles) Develop aquatic/riparian habitat management plans (HMPs) for these six priority areas (including monitoring plans, approx. $473,000 for approx. 249 stream miles).	Improve or enhance aquatic/ riparian habitat on the following priority areas: - Upper San Miguel River & its tributaries (54 miles) - Upper Dolores River (52 miles) - Lower San Miguel & its tributaries (67 miles) - Animas River drainage (24 miles) - Lower Dolores River & its tributaries (143 miles) - SW quadrant streams (55 miles) Develop aquatic/riparian HMPs for these six priority areas (including monitoring plans). Estimated costs for implementing habitat improvements over a 10-year period will be approx. $1.3 million on approx. 400 stream miles.	Reestablish river otters in the Dolores River. Improve or enhance aquatic/ riparian habitat on the following priority areas: - Upper San Miguel River & its tributaries (44 miles) - Upper Dolores River (30 miles) - Lower San Miguel & its tributaries (20 miles) Develop aquatic/riparian HMPs for these three priority areas (including intensive monitoring plans). The estimated costs for implementing habitat improvements over a 10-year period will be approx. $233,000 for approx. 94 stream miles.

Resource/ Activity	General Guidance	Specific Management Direction: Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Livestock Management	Manage suitable vegetation types under low to moderate intensity for livestock production, with intent to utilize available forage & maintain forage vigor, while not degrading wildlife habitat. Constrain range treatment projects in size, layout & type with intent to enhance wildlife & livestock forage, vegetation & habitat diversity. Reduce number or season-of-use for livestock where needed to provide sufficient forage for wildlife & to protect aquatic/riparian resources, especially on big game winter & spring ranges.		Limit total use to 50% on forage species. Livestock use should be limited where necessary to protect highly preferred species of plants. Maintain an overall cover/forage ratio of 40/60. Limit width of vegetation openings from approx. 150 to 200 yards in big game winter ranges. In pinyon-juniper and shrub vegetation types, retain 35%-40% of original cover when completing vegetation treatments.	Limit total use to 50% on forage species. Livestock use should be limited where necessary to protect highly preferred species of plants. Maintain an overall cover/forage ratio of 40/60. Limit width of vegetation openings from approx. 150 to 200 yards in big game winter ranges. In pinyon-juniper and shrub vegetation types, retain 35%-40% of original cover when completing vegetation treatments.	Limit total use to 50% on forage species. Livestock use should be limited where necessary to protect highly preferred species of plants. Maintain an overall cover/forage ratio of 40/60. Limit width of vegetation openings from approx. 150 to 200 yards in big game winter ranges. In pinyon-juniper and shrub vegetation types, retain 35%-40% of original cover when completing vegetation treatments.
Forestry	Manage forest lands to enhance wildlife resource. Plan wood product sales in wildlife areas to improve big game forage & other wildlife needs.		Provide reasonable opportunity to salvage forest products prior to and following habitat improvement treatments. Provide legal & physical access to vegetation treatments to facilitate salvage of forest products when feasible.	Provide reasonable opportunity to salvage forest products prior to and following habitat improvement treatments. Provide legal & physical access to vegetation treatments to facilitate salvage of forest products when feasible.	Provide reasonable opportunity to salvage forest products prior to and following habitat improvement treatments. Provide legal & physical access to vegetation treatments to facilitate salvage of forest products when feasible.
Minerals	Allow mineral development in all areas not withdrawn from entry. Provide protective stipulations to limit impacts to wildlife habitat or species. Limit &(or) provide protective stipulations for mineral development on habitat for T&E species.	Continue present leasing stipulations for oil & gas in wildlife winter ranges, eagle concentration areas, elk calving grounds, peregrine falcon eyries and sage grouse strutting areas as per existing oil & gas umbrella environmental assessments (EAs).	Continue present leasing stipulations with changes to wildlife winter ranges & eagle concentration areas.	Continue present leasing stipulations with changes to wildlife winter ranges and eagle concentration areas as shown in Resource Conservation Alternative.	Continue present leasing stipulations with changes to wildlife winter ranges and eagle concentration areas as shown in Resource Conservation Alternative.
Lands	Allow for disposal of parcels of public land not determined to be significant and manageable for wildlife habitat. Major utility		Pursue exchange of public lands to enhance wildlife values in Dry Creek Basin. Primary consideration for exchange	Pursue exchange of public lands to enhance wildlife values in Dry Creek Basin. Primary consideration for exchange should be given	Pursue exchange of public lands to enhance wildlife values in Dry Creek Basin. Primary consideration for exchange should be given

Resource/ Activity	General Guidance	Specific Management Direction: Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Lands (continued)	corridors would generally be excluded except on case-by-case basis depending on site-specific impacts of proposal. Acquire or exchange land when management opportunities for wildlife are enhanced. Acquire fishing easements on acreages associated with priority streams. Allow other land action, when there is a clear & significant public need, when they will result in minimal adverse impacts, or when they are beneficial to wildlife.		should be given to CDOW; however, other opportunities which may enhance wildlife values will not be dismissed.	to CDOW; however, other opportunities which may enhance wildlife values will not be dismissed.	to CDOW; however, other opportunities which may enhance wildlife values will not be dismissed.
Soils and Water	Maintain soil productivity, minimize man-caused soil erosion and strive to achieve adequate vegetation cover for watershed protection and plant vigor. Maintain or improve water quality and quantity for multiple use resource needs. Maintain minimum instream flows for wildlife & fishery needs.				
Fire	Provide level of protection from wildfire that will result in least total cost and will generally enhance wildlife management values. Use prescribed fire when possible to enhance wildlife habitat.				
Access	Provide administrative access to public land for managing wildlife habitat. Provide very little or no maintenance to roads. Close & reclaim any abandoned or poorly designed roads. Acquire public access where needed to allow wildlife-related recreation (including hunting & fishing in underutilized areas).		Acquire administrative access to McKenna Peak for potential peregrine falcon eyrie management.	Acquire access to Chromo Mesa to enhance all management & public hunting opportunities. Acquire administrative access to Roc Creek.	Acquire access to Chromo Mesa to enhance all management & public hunting opportunities. Acquire administrative access to Roc Creek.

Management Guidance for Area C: Emphasis on Recreation

BLM's recreation program is structured to the intensity and type of recreation management required. There are two primary types of recreation management situations that are recognized and which guide the direction of management emphasis in the RMP area. The first, Special Recreation Management Areas (SRMAs), occurs where recreation is defined and recognized as the principal management objective. The second situation, Extensive Recreation Management Areas (ERMAs), occurs where recreation is not the principal management objective but may be an issue or concern of some significance in multiple use management for the area, which is consistent with BLM's role in accommodating the dispersed, largely unstructured recreation that typifies the large expanses of public land in the San Juan RMP area.

The primary management goal is to ensure the continued availability of outdoor recreation opportunities which the public seek and which are not readily available from other public or private entities. Secondary goals include protecting resources, meeting legal requirements for visitor health and safety, and mitigating resource user conflicts involving recreation.

Recreation objectives are to provide dispersed and resource-dependent types of recreation opportunities such as cross-country skiing, hunting, hiking, boating, jeeping, and fishing and to deal with the limited number of situations which require special or more intensive types of recreation management. Decreases in nonrecreational outputs may occur. Investments will be concentrated in SRMAs and in those ERMAs where these recreation program goals apply.

Management objectives would include major investments in facilities and visitor management. Where recreation is not the principal management objective, management direction will largely emphasize the provision of access and visitor information.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Develop and protect suitable cultural resource properties for public enjoyment through such practices as interpretive signing, stabilization, etc.			Emphasize cultural resource values & semiprimitive recreation opportunities in Cross, Cahone, Squaw/Papoose, Dolores River, & Tabeguache Creek canyons.	Emphasize cultural resource values & semiprimitive recreation opportunities in Cross, Cahone, Squaw/Papoose, Dolores River, & Tabeguache Creek canyons.
Visual	Preserve scenic values, enhance viewing opportunities and increase variety, where appropriate. Establish site-specific visual quality objectives and design guidelines for landscape development projects during activity planning.		Manage key travel routes in Silverton SRMA to protect sensitive visual values (Class II). Manage upper portion of Dolores (Bradfield Bridge to Disappointment Creek-41 mi) under VRM Class II guidelines. Manage from Disappointment Creek to Gypsum Valley Bridge under VRM Class III guidelines. Manage areas seen from high use, sensitive travel routes in outstanding scenic areas under VRM Class II low to moderate visual contrast design guidelines.	Manage key travel routes in Silverton SRMA to protect sensitive visual values (Class II). Manage upper portion of Dolores (Bradfield Bridge to Disappointment Creek-41 mi) under VRM Class II guidelines. Manage from Disappointment Creek to Gypsum Valley Bridge under VRM Class III guidelines.	Manage key travel routes in Silverton SRMA under VRM Class II guidelines. Manage upper portion of Dolores (Bradfield Bridge to Disappointment Creek-41 mi) under VRM Class II guidelines. Manage from Disappointment Creek to Gypsum Valley Bridge under VRM Class III guidelines. Manage Weber and Menefee as VRM Class II. Manage Tabeguache Canyon area as Outstanding Natural Area.

Resource/ Activity	General Guidance	Specific Management Direction: Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Visual (continued)			The public land along the boundary of Mesa Verde National Park (from the entrance road west) & along the San Miguel River from its upper reaches to Naturita, Colorado, should be managed under VRM Class II guidelines.		Public land along boundary of Mesa Verde National Park (from entrance road west) & along San Miguel River from its upper reaches to Naturita, Colorado, should be managed under VRM Class II guidelines.
Recreation	Manage for a variety of recreation opportunities consistent with classifications determined in Recreational Opportunity Spectrum (ROS) inventories. Provide necessary visitor management services & facilities required to meet recreation program goals. Manage the Dolores River as an SRMA for water-based recreation opportunities. The entire Silverton portion of the planning area should also be managed as an SRMA for its wide variety of recreation values & opportunities.	Continue management of the Silverton SRMA (45,000 acres). Manage Weber & Menefee mountains as primitive study areas in 1972 land use plans.	Continue management of the Silverton SRMA (45,000 acres).	Continue management of the Silverton SRMA (45,000 acres). Improve roads, provide interpretive displays, comfort stations & camping area.	Continue management of the Silverton SRMA (45,000 acres). Develop a Recreation Management Plan for the Silverton SRMA that outlines specific needs for visitor management facilities.
			Continue ORV plan in Silverton as per existing MFP management.	Continue ORV plan in Silverton as per existing MFP management.	Continue ORV plan in Silverton as per existing MFP and U.S. Forest Service planning direction. ORV designations within land obtained from USFS northeast of Silverton--Motorized use within area is limited to BLM roads #4511, 4512, & 4514. Designations will be implemented with on-the-ground informational signing program that utilizes white arrow concept. Limitations are consistent with designations made in BLM's 1981 Off-Road-Vehicle Designations for Gunnison Basin planning area and with recommendations originally made for area in Draft San Juan National Forest Land & Resource Management Plan (USFS 1983).
		Upon completing McPhee Dam & reservoir & after realizing useable downstream recreation flows, manage 94 miles of the Dolores River for its wild & scenic qualities as per existing Management Framework Plan (MFP) direction.	Upon completing McPhee Dam & reservoir & after realizing useable downstream recreation flows, manage 94 miles of the Dolores River SRMA under limited allocation system for visitor use. As per classifications determined by the BLM's ROS system, manage the Dolores River from Bradfield Bridge to Dove Creek pump station for its semiprimitive nonmotorized recreation setting opportunities; from	Upon completing McPhee Dam & reservoir, & after realizing useable downstream recreation flows, manage 94 miles of the Dolores River SRMA as per classifications determined by the BLM's ROS system, & encourage commercial river use. Manage the Dolores River from the Bradfield Bridge to Dove Creek pump station for its semiprimitive nonmotorized recreation setting opportunities & from Dove Creek pump station to	Upon completing McPhee Dam & reservoir & after realizing useable downstream recreation flows, manage 94 miles of Dolores River SRMA as per classifications determined by BLM's ROS system. Manage Dolores River from the Bradfield Bridge to Dove Creek pump station for its semiprimitive nonmotorized recreation setting opportunities; from Dove Creek pump station to Disappointment Creek for its semiprimitive

Resource/ Activity	General Guidance	Current Management	Specific Management Direction: Resource Conservation	Resource Utilization	Proposed Plan
Recreation (continued)			Dove Creek pump station to Disappointment Creek for its semiprimitive motorized setting opportunities, & from Disappointment Creek to Gypsum Valley Bridge under a roaded, natural setting, & from Gypsum Valley Bridge to Bedrock for its primitive values & setting opportunities. Develop a Recreation Area Management Plan for river that outlines specific management facilities needed. Management emphasis will be directed toward managing resource-dependent end of ROS. Typical facilities will include parking areas, campsites, toilets, boat ramps, & informational signing.	Disappointment Creek for its roaded natural setting opportunities; from Disappointment Creek to Gypsum Valley Bridge for its rural settings; & from Gypsum Valley Bridge to Bedrock for its semiprimitive nonmotorized recreation setting opportunities. Develop a Recreation Area Management Plan for the river that outlines specific management facilities needed to encourage visitor use while not degrading the resource.	motorized setting opportunities; from Disappointment Creek to Gypsum Valley Bridge for its rural settings; and from Gypsum Valley Bridge to Bedrock for its primitive values & settings. Determine carrying capacities for river corridor by specific ROS setting. Develop Recreation Area Management Plan that addresses & emphasizes cooperative & concurrent recreation management efforts of USFS & Bureau of Reclamation's dam & reservoir operations. The management plan must also address recreation carrying capacity, visitor use & preferences, & permits. Close Dolores SRMA to ORV use. Weber & Menefee mountains would be managed for their semiprimitive recreation values. Both areas would be closed to ORVs.
			Manage Lemon Dam & Vallecito Reservoir areas for their semiprimitive nonmotorized values. Close to ORV use & manage under VRM Class II guidelines.	Manage under allocation system for visitor use. Close the SRMA to ORV use.	Manage Lemon Dam & Vallecito Reservoir areas for their semiprimitive nonmotorized values. Close to ORV use & manage under VRM Class II guidelines.
Wildlife	Manage aquatic & terrestrial wildlife habitat to provide frequent wildlife sightings, recreational hunting & fishing, diverse vegetation cover, etc. Continue to provide necessary management for T&E species. Other wildlife values will be managed as long as they do not conflict with recreation or cultural values.		Allow for introduction of bighorn sheep & river otters in the Dolores River. Improve fishery values on Dolores & San Miguel (including Beaver & Fall creeks) rivers to improve their recreation values. Also improve recreation access to Beaver Creek & San Miguel River.	Allow for introduction of bighorn sheep & river otters in Dolores River. Improve fishery values on Dolores & San Miguel (including Beaver & Fall creeks) rivers to improve their recreation values. Also improve recreation access to Beaver Creek & San Miguel River. Provide protection for sensitive plant species and relic Great Basin grassland plant associations in the Coyote Wash area of Dolores Canyon.	Allow for introduction of bighorn sheep & river otters in Dolores River. Improve fishery values on Dolores & San Miguel (including Beaver & Fall creeks) rivers to improve their recreation values. Also improve recreation access to Beaver Creek & San Miguel River. Manage McElmo RNA to protect for scientific research. Remove the mineral withdrawal but continue the no-surface occupancy stipulations for oil & gas leasing.
Livestock Management	Manage livestock under reduced intensity to utilize available forage & maintain plant vigor while not degrading recreation. Do not attempt to maintain or		Manage livestock grazing to make it compatible with recreation use.	Manage livestock grazing to make it compatible with recreation use.	Manage livestock grazing to make it compatible with recreation use.

Resource/ Activity	General Guidance	Specific Management Direction: Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Livestock Management (continued)	Improve forage composition & production through range vegetation treatments with exception of prescribed fire where appropriate. Use "rustic" range improvements near developed recreation areas.				
Forestry	Manage lands suitable for timber & woodland production to enhance recreational opportunities & to maintain healthy stand conditions.		Allow no regulated sales of wood products in the Silverton SRMA, except to control disease & insect outbreaks where necessary. Allow no sales of wood products in the Dolores River SRMA.	Allow no regulated sales of wood products in the Silverton SRMA, except to control disease & insect outbreaks where necessary. Allow no sales of wood products in the Dolores River SRMA.	Allow no regulated sales of wood products in the Silverton SRMA, except to control disease & insect outbreaks where necessary. Allow no sales of wood products in the Dolores River SRMA.
Minerals	Manage mineral development to limit conflict with management of high recreational values. When possible, schedule activities so that conflicts are minimized between recreational & mineral activities. Ensure that site rehabilitation activities follow operating plans & address recreation management objectives.		Withdraw from all forms of mineral entry & allow no mineral leasing in the Dolores River SRMA (from the Bradfield Bridge to the confluence with Disappointment Creek & from Big Gypsum Valley to 1 mile above Bedrock).		Provide for no-surface occupancy stipulations for mineral leasing in the Dolores River SRMA (from the Bradfield Bridge to the confluence with Disappointment Creek & from Big Gypsum Valley to 1 mile above Bedrock). Provide for no-surface occupancy stipulations for oil & gas leasing in Weber & Manefee mountains.
Lands	Allow for disposal of parcels of public land not needed for recreation management. Major utility corridors will not be allowed. Other land actions will be allowed if they are designed to meet the established recreation management objectives, or when there is a clear & significant public need. Acquire or exchange land when opportunities for recreation management will be enhanced.			If needed, allow major corridors to cross the Dolores River between Disappointment Creek & the Big Gypsum Valley Bridge.	If needed, allow major corridors to cross the Dolores River between Disappointment Creek & the Big Gypsum Valley Bridge.

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Soils and Water	Maintain soil productivity, minimize man-caused soil erosion and strive to achieve adequate vegetation cover for watershed protection & plant vigor. Maintain or improve water quality & quantity for multiple use resource needs. Secure sufficient water rights to provide for recreation management needs.				
Fire	Utilize fire management techniques that maintain long-term recreation quality objectives. Suppression of wildfires will generally occur but prescribed fire will be allowed if it will meet or exceed recreation objectives.				
Access	Provide public access to the public lands to enhance the recreation values. Provide a moderate level of maintenance on primary roads to promote user safety. Minimal levels of maintenance will be provided on secondary roads.		Assist in acquiring easements & fee title at sites as recommended in Dolores Downstream Recreation Site Plan Report. Acquire & (or) improve access to Beaver Creek for recreational pursuits.	Assist in acquiring easements & fee title at sites as recommended in Dolores Downstream Recreation Site Plan Report. Acquire & (or) improve access to Beaver Creek for recreational pursuits.	Assist in acquiring easements & fee title at sites as recommended in Dolores Downstream Recreation Site Plan Report. Acquire & (or) improve access to Beaver Creek for recreational pursuits.

Management Guidance for Area D: Emphasis On Wilderness

Management direction will allow for wilderness management in accordance with the Wilderness Act of 1964. The objective of management is to provide predominantly untrammeled, natural environments for the physical, biologic and social components of wilderness. The physical and biologic components are managed so that natural processes are unimpeded by human activities or use. Natural processes, including naturally occurring fire, soil erosion and insect and disease cycles, proceed unrestricted by man. Emphasize high levels of solitude, few party encounters, and high opportunities for challenge, risk and self-reliance. Human travel is cross-country or by use of a trail system. Recreation use will be consistent with wilderness resource management or will be restricted and prohibited when or where needed.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Allow no development of cultural resources (other than stabilization) for recreation purposes. Allow use of cultural resource properties for religious or research purposes only when such use will not degrade wilderness values.		Provide for cultural resource management & interpretation of the high value resources contained in the Tabeguache Creek, Squaw/Papoose, Cross, Dolores River, & Cahone canyon WSAs.		Protect & interpret unique & significant values in the Dolores River Canyon WSA.
Recreation	Allow opportunities for primitive and unconfined recreation activities featuring solitude; the chance to experience unmodified, natural ecosystems; & to travel cross-country in an environment where success or failure is directly dependent on ability, knowledge & initiative; but in a way to prevent deteriorating the winderness resource. ORV use is not allowed. Manage recreation use to provide users with experiences & psychological outcomes expected in this type of setting. Control social & physical-carrying capacity to provide such outcome. Establish site-specific visual quality objectives & design guidelines for landscape development projects during activity planning.		Use a permit system to limit use in WSAs. Establish visual Class I design standards for all eight WSAs.		Provide for nonmotorized river running activities compatible with the wilderness resource in the Dolores River Canyon WSA. Establish visual Class I low contrast design standards for Dolores River Canyon WSA.

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Wilderness	Manage any recommended WSAs per the Wilderness Act of 1964.		Recommend all eight WSAs (Cahone, Cross, & Dolores River canyons, McKenna Peak, Manefee & Weber mountains, Squaw/Papoose Canyon, & Tabeguache Creek Canyon) for wilderness designation.		Recommend the Dolores River Canyon WSA for wilderness designation.
Wildlife	Permit fish & wildlife research or inventories. Allow natural distribution & population of vegetation & wildlife species indigenous to area to maintain natural balance with each other, their habitats, & man. Provide for nonimpairing wildlife improvement to improve terrestrial or aquatic/riparian habitat.		Allow nonimpairing aquatic/ riparian improvements in the Dolores River Canyon WSA. Wildlife winter range values should be managed in Weber & Manefee mountains & McKenna Peak WSAs. Allow the introduction or reintroduction of bighorn sheep & river otters into the Dolores River Canyon WSA.		Allow nonimpairing aquatic/ riparian improvements & introduction or reintroduction of bighorn sheep & river otters into the Dolores River Canyon WSA. Provide protection for sensitive plant species and relic Great Basin grassland plant associations in the Coyote Wash area of Dolores Canyon.
Wild Horses	Manage wild horses to promote their free-roaming state & prevent degradation of the resources while maintaining wilderness values.		Manage 75 wild horses in the McKenna Peak WSA. Management would be conducted in a nonimpairing manner. Allow helicopter use to manage horses.		
Livestock Management	Manage for improved range condition. Do not use vegetation manipulations to improve forage production. Emphasize primitive, natural material for water developments & range structures that are approved in wilderness management plan.				
Forestry	Allow no harvesting of forest products. Available forest land will remain in the commercial forest lands base until the area has been designated as wilderness.				

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Minerals	Administer all mineral activity as required by Section 4(d) of the Wilderness Act of 1964. Deny issuance of any future mineral leases within the wilderness area.				
Lands	Acquire or exchange private lands & subsurface mineral estates within wilderness areas that will enhance wilderness values or manageability. Allow no utility corridors & no new facilities except those authorized through Wilderness Act provisions. Remove any existing, nonconforming structures unless they are determined to be of cultural or historic value or necessary for administering the area.		Acquire private lands (40 acres) & minerals (120 acres) within the Menefee Mountain WSA. Acquire Section 36 (State of Colorado) in Weber Mountain WSA. Acquire private land or easements between Bedrock & the northern boundary of the Dolores River Canyon WSA to improve its management. Coordinate these acquisition efforts with recommendations that are detailed in the Dolores Downstream Site Selection Report, which recommends acquisition & development of a boating access site (to be constructed as part of the Dolores Project--McPhee Dam) near Bedrock Bridge. Acquire Section 36 (State of Colorado) adjacent to McKenna Peak WSA. Do not renew Federal Energy Regulatory Commission's (FERC) powersite classifications on the Dolores River Canyon WSA when reviewed.		Acquire easements between Bedrock & the northern boundary of the Dolores River Canyon WSA to improve its management. Coordinate these acquisition efforts with recommendations that are detailed in the Dolores Downstream Site Selection Report, which recommends acquisition & development of a boating access site (to be constructed as part of the Dolores Project--McPhee Dam) near Bedrock Bridge. Do not renew Federal Energy Regulatory Commission's (FERC) powersite classifications on the Dolores River Canyon WSA when reviewed.
Soils and Water	Stabilize & rehabilitate man-caused disturbances if identified in a wilderness management plan. Maintain or improve water quality & quantity through non-impairing means.				

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Fire	Perpetuate & maintain ecosystems within wilderness by natural occurrence of fire, insects & disease. Suppression may be taken on man-caused fires, fires threatening human lives & property, or fires which threaten to escape from wilderness to adjacent areas with more restrictive fire prescriptions.				
Access	Allow no motorized ORV use. Trail construction for foot & (or) horseback will be addressed in a wilderness management plan.		Close cherrystem roads & ways in five WSAs (Tabeguache Creek & Cahone, Squaw/Papoose, Dolores River, & Cross canyons).		Close ways in the Dolores River Canyon WSA.

Management Guidance for Area E: Emphasis on Mineral Development

Management direction will emphasize mineral development on the public lands. Mineral values indicate that significant reserves of valuable minerals are present and that development is either currently ongoing or will occur within the near future. Other resource uses will occur to the extent that they are compatible with mineral development. Limited expenditures of public resources will be used on developing the present land resources. Livestock grazing will continue, wildlife habitat will be maintained where feasible, and cultural resources will receive the protection currently afforded by law.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Protect & manage important cultural resource properties.				
Recreation	Provide recreation opportunities that do not conflict with mineral development. Allow motorized ORV use. Establish site-specific visual quality objectives & design guidelines for landscape development projects during activity planning.				
Wildlife	Protect T&E species & maintain or improve their habitat. Provide for minimal investments to enhance key wildlife species.	Continue present leasing stipulations for oil & gas in wildlife winter ranges, eagle concentration areas, elk calving grounds, peregrine falcon eyries & sage grouse strutting areas as per existing oil & gas umbrella EAs.	Continue present leasing stipulations with changes to wildlife winter ranges & eagle concentration areas.	Continue present leasing stipulations with changes to wildlife winter ranges & eagle concentration areas.	Continue present leasing stipulations with changes to wildlife winter ranges & eagle concentration areas.
Livestock Management	Manage suitable vegetation types under moderate intensity for livestock production, with the intent to use available forage & maintain forage vigor. Reduce the number of season-of-use for livestock where needed to minimize impacts to mineral operations & revegetation efforts or to minimize erosion from site. Limit range improvements on areas designated for				

Resource/ Activity	General Guidance	Specific Management Direction: Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Livestock Management (continued)	mineral development to protect investments. Adjust livestock use as land is removed from production for mineral purposes.				
Forestry	Allow for the sale or disposal of forest products or timber that may be lost in mineral development or that is needed for managing the resource. Meet demand without degradation or conflict.				
Minerals	Allow mineral development on all areas not specifically excluded from development. Provide protective stipulations to limit impacts to other resource values.	Continue oil, gas, & CO_2 operations throughout planning area (183,000 acres in areas designated as Known Geologic Structures [KGSs]).	Continue oil, gas, & CO_2 operations throughout planning area (183,000 acres in areas designated as KGSs).	Continue oil, gas, & CO_2 operations throughout planning area (183,000 acres in areas designated as KGS). In addition, 10,500 acres of potential oil & gas trends are shown.	Continue oil, gas, & CO_2 operations throughout planning area (183,000 acres in areas designated as KGSs).
		Continue cooperative management to protect surface resources on 19,800 acres of Department of Energy (DOE) lease tracts.	Continue cooperative management to protect surface resources on 19,800 acres of DOE lease tracts.	Continue cooperative management to protect surface resources on 19,800 acres of DOE lease tracts.	Continue cooperative management to protect surface resources on 19,800 acres of DOE lease tracts.
		Continue approved operations of 4,500 acres of hard rock mining under 43 Code of Federal Regulations (CFR) 3809 regulations.	Continue approved operations of 4,500 acres of hard rock mining under 43 CFR 3809 regulations.	Continue approved operations of 4,500 acres of hard rock mining under 43 CFR 3809 regulations.	Continue approved operations of 4,500 acres of hard rock mining under 43 CFR 3809 regulations.
		Continue sodium lease (120 acres).	Continue sodium lease (120 acres).	Continue sodium lease (120 acres).	Continue sodium lease (120 acres).
		Continue sand & gravel operations (880 acres).	Continue sand & gravel operations (880 acres).	Continue sand & gravel operations (880 acres). In addition, 1,200 acres on Ewing Mesa would be developed for sand & gravel.	Continue sand and gravel operations (880 acres). In addition, 400 acres on Ewing Mesa would be available for development for sand & gravel.
		Provide protective management of the fossils at the Sawpit site.	Provide protective management of the unique fossils in the Placerville area.	Manage Cross & Squaw/Papoose canyons & the Rare Snake & Lizard Area as "Areas of Critical Mineral Potential" (ACMPs).	Provide protective management of the unique fossils in the Placerville area through the use of stipulations on a case-by-case basis in the environmental documents.

Resource/ Activity	General Guidance	Specific Management Direction: Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Minerals (continued)		Continue existing coal leases (National King Coal, 340 acres; Perma Resources, 90 acres).	Allow coal leasing on 32,000 acres in Hay Gulch-Cherry Creek area & 2,180 acres of lands which are under private surface ownership but contain Federal subsurface mineral rights within the San Juan National Forest.*	Allow coal leasing on 1,480 acres in the Nucla Known Recoverable Coal Resource Area (KRCRA), 1,240 acres in the East Cortez KRCRA, & 54,000 acres in the Durango KRCRA.*	Allow coal leasing on 1,480 acres in the Nucla KRCRA & 46,000 acres in the Durango KRCRA.*
Lands	Allow for disposal of parcels of public land not needed for mineral development. Major utility corridors will be allowed as long as they don't conflict with mineral development. Allow other land actions as long as they don't limit mineral development, or when there is a clear & significant public need. Acquire or exchange land & subsurface mineral estate when mineral development will be enhanced.				
Soils and Water	Maintain soil productivity & minimize soil erosion when possible. Maintain water quality & quantity when possible for resource needs.				
Fire	Provide a level of protection from wildfire that will result in the least total cost & will protect mineral developments on the public lands.				
Access	Provide or maintain public access so as not to impede mineral development. Work with mineral developers to assure roads are maintained for public safety.				

* These priority areas were determined based on 1983 coal data & indications of interest by industry. The remaining coal lands that were not determined to be nonsuitable or identified as priorities for future leasing will be managed for other multiple use considerations. These lands would be made available for future leasing only when the coal priority areas had been depleted or a significant demand was expressed that could not be met by the existing coal priority areas.

Management Guidance for Area F: Emphasis on Cultural Resources

Management direction will emphasize the preservation, management, and use of the cultural resource properties found within the area. Emphasis will be on protecting the soil, vegetation and wildlife resource to enhance the natural environment of the area and hence the cultural resource setting. Mineral resources will be developed while constrained by existing laws, policy and regulations pertaining to cultural resources. Other resource and land management activities will be constrained to avoid conflict with preservation, development, and protective objectives.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Manage cultural resources for protection, preservation, investigation & public use (i.e., development & interpretation), where appropriate.	Manage the Anasazi Heritage Center (annual operating costs - $300,000). Continue management on the following cultural sites/areas: Cannonball Ruin Dominguez-Escalante Ruins Hanging Flume Lowry Ruin McLean Basin Towers Sand Canyon	Manage the Anasazi Heritage Center (annual operating costs - $300,000). Emphasize management & develop cultural management plans on the following cultural sites/areas (approx. $111,000 annual operational costs): Bull Canyon Cannonball Ruin Cow Mesa Dolores Cave Dominguez-Escalante Ruins East Rock Canyon Hamilton Mesa Hanging Flume Indian Henry's Cabin Lightning Tree Tower Group Lowry Ruin McLean Basin Towers Mockingbird Mesa Painted Hand Petroglyphs Painted Hand Ruin Sand Canyon Squaw/Papoose Canyon Tabeguache Pueblo	Manage the Anasazi Heritage Center (annual operating costs - $300,000). Emphasize management & develop cultural management plans on the following cultural sites/areas (approx. $114,000 annual operational costs): Bull Canyon Cahone Canyon Cannonball Ruin Cow Mesa Cross Canyon Dolores Cave Dominguez-Escalante Ruins East Rock Canyon Hamilton Mesa Hanging Flume Indian Henry's Cabin Lightning Tree Tower Group Lowry Ruins McLean Basin Towers Mockingbird Mesa Painted Hand Petroglyphs Painted Hand Ruin Sand Canyon Squaw/Papoose Canyon Tabeguache Canyon Tabeguache Pueblo	Manage the Anasazi Heritage Center (annual operating costs - $300,000). Emphasize management & develop cultural management plans on the following cultural sites/areas (approx. $114,000 annual operational costs): Bull Canyon Cahone Canyon Cannonball Ruin Cow Mesa Cross Canyon Dolores Cave Dominguez-Escalante Ruins East Rock Canyon Hamilton Mesa Hanging Flume Indian Henry's Cabin Lightning Tree Tower Group Lowry Ruin McLean Basin Towers Mockingbird Mesa Painted Hand Petroglyphs Painted Hand Ruin Sand Canyon Squaw/Papoose Canyon Tabeguache Canyon Tabeguache Pueblo
Recreation	Make areas available for day use activities, where feasible. Construct public convenience developments such as restrooms, observation areas, or interpretative trails. Provide input into development & operation of			Manage Cross, Cahone, Squaw/ Papoose & Tabeguache Creek canyons under VRM Class II standards, close to ORVs, & provide for a semiprimitive non-motorized recreation experience in these above areas.	Manage Cross, Cahone, Squaw/ Papoose & Tabeguache Creek canyons under VRM Class II standards, close to ORVs, & provide for a semiprimitive non-motorized recreation experience in these above areas.

Resource/ Activity	General Guidance	Specific Management Direction: Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Recreation (continued)	Anasazi Heritage Center. Develop public or visitor management plans for areas. Establish site-specific visual quality objectives & design guidelines for interpretation & visitor management during activity planning.				Manage the Tabeguache Canyon cultural emphasis area as an Outstanding Natural Area. Develop recreation activity management plans for Lowry & Dominguez-Escalante cultural sites.
Wildlife	Protect & maintain wildlife habitat. Where feasible, complete wildlife habitat improvements to enhance wildlife viewing in association with cultural values. Continue to manage T&E species habitat to protect the species.				
Livestock Management	When necessary, reduce or control livestock grazing to protect cultural resources.				
Forestry	Allow removal of forest products only when compatible with cultural, wildlife, or recreation values or when done to improve safety.				
Minerals	Pursue withdrawal from mineral entry on any important cultural properties. In the event withdrawal is not made (and on areas not withdrawn), supervise the activities of claimants, lessees, & permittees to insure minimum impacts on cultural values. Use no-surface occupancy stipulations to protect important cultural values.	Continue present protection & no-surface occupancy stipulations for oil & gas on Sand & East Rock canyons; Cannonball, Lowry, Lightning Tree Tower, Hovenweep buffer, Battle Rock, Easter Ruin, Seven Towers Ruin, & Dominguez-Escalante Ruins, McLean Basin Towers; & Painted Hand Petroglyphs.	Continue present protection & no-surface occupancy stipulations for oil & gas on Sand & East Rock canyons; Cannonball, Lowry, Lightning Tree Tower, Hovenweep buffer, Battle Rock, Easter Ruin, Seven Towers Ruin, & Dominguez-Escalante Ruins, McLean Basin Towers; & Painted Hand Petroglyphs. Withdraw from mineral entry & provide no-surface occupancy stipulations for oil & gas leasing on Painted Hand Ruin, Dolores Cave, Tabeguache Pueblo, Bull Canyon Rockshelter, & Indian Henry's Cabin.	Continue present protections & no-surface occupancy stipulations for oil & gas on Sand & East Rock canyons; Cannonball, Lowry, Lightning Tree Tower, Hovenweep buffer, Battle Rock, Easter Ruin, Seven Towers Ruin, & Dominguez-Escalante Ruins, McLean Basin Towers; & Painted Hand Petroglyphs. Withdraw from mineral entry & provide for no-surface occupancy stipulations for oil & gas leasing on Painted Hand Ruin, Dolores Cave, Tabeguache Pueblo, Bull Canyon Rockshelter, & Indian Henry's Cabin.	Continue present protection and no-surface occupancy stipulations for oil and gas on Sand and East Rock canyons; Cannonball, Lowry, Lightning Tree Tower, Hovenweep buffer, Battle Rock, Easter Ruin, Seven Towers Ruin, Dominguez-Escalante Ruins, McLean Basin Towers; and Painted Hand Petroglyphs. Withdraw from mineral entry & provide for no-surface occupancy stipulations for oil & gas leasing on Painted Hand Ruin, Bull Canyon Rockshelter, Dolores Cave, Tabeguache Pueblo, & Indian Henry's Cabin.

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Minerals (continued)					Provide for no-surface occupancy stipulations for oil & gas leasing on Cahone, Cross, Squaw/Papoose, & Tabeguache canyons to protect cultural values.
Lands	Allow no disposal of public land where significant cultural values are involved. Major utility corridors (powerlines of 115 kv & above & pipelines 6" in diameter & above) would generally not be allowed. Allow other land actions to occur when they would result in minimal adverse impact, when they will be beneficial to cultural resource management, or when there is a clear & significant public need. Acquire or exchange land when cultural management will be enhanced.				
Soils and Water	Maintain soil productivity, minimize man-caused soil erosion & stabilize & rehabilitate areas with severe man-caused soil erosion when feasible. Maintain water quality & quantity. Apply for water rights & protect riparian zones on springs associated with cultural sites.				
Fire	Provide level of protection on all fires that will protect the cultural resource values.				

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Access	Provide administrative access to public land to enhance the management of the cultural resource. Provide public access to some of the cultural areas where public use will be managed. Provide maintenance of roads to a level of minimum standards for user safety. Close roads when necessary to limit access to protect cultural values.		Limit public access to Mockingbird Mesa, Bull Canyon Rockshelter, Indian Henry's Cabin, & Sand & East Rock canyons to foot or horse only & limit vehicle access to authorized vehicles only.	Limit public access to Mockingbird Mesa, Bull Canyon Rockshelter, & Indian Henry's Cabin to foot or horse only & limit vehicle access to authorized vehicles only. Acquire easement into Sand Canyon area. Acquire administrative access to Cannonball Mesa & Yellowjacket Canyon.	Limit public access to Mockingbird Mesa, Bull Canyon Rockshelter, Sand & East Rock canyons, & Indian Henry's Cabin to foot or horse only & limit vehicle access to authorized vehicles only. Acquire easement into Sand Canyon area. Acquire administrative access into Cannonball Mesa & Yellowjacket Canyon.

Management Guidance for Area G: Emphasis on General Natural Resource Management

Management direction for these areas will consist of general multiple use as prescribed in the Federal Land Policy and Management Act (FLPMA) of 1976. The resource values contained in these areas are not significant to the degree that a dominant use exists. Management guidance will consist of existing laws, policy, and manuals concerning each resource program.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Manage cultural resource properties in accordance with applicable laws, regulations & public interest. Provide for dispersed types of recreation opportunities. Utilize sign, maps, etc., to help manage the dispersed use. Allow ORV use. Establish site-specific visual quality objectives & design guidelines for landscape development projects during activity planning.				
Wildlife	Protect T&E species & maintain or improve their habitat. Manage all other habitat to provide satisfactory conditions.				
Livestock Management	Manage vegetation resource so it maintains itself satisfactorily with a generally upward trend. Rehabilitate needs & other resource values.				
Forestry	Provide a sustained yield of forest products consistent with land capability, suitability, protection needs & other resource values.				
Minerals	Provide for mineral development in all areas not withdrawn from mineral entry. Provide protective stipulations to limit impacts to other resource values.				

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Lands	Allow for disposal of parcels of public land not needed for resource management. Acquire or exchange land when resource management opportunities will be enhanced. Major utility corridors would be allowed with protective stipulations to prevent or limit adverse impacts to other resource values. Allow other land actions to occur with appropriate stipulations, or when there is a clear & significant public need.				
Soils and Water	Maintain soil productivity, minimize man-caused soil erosion & strive to achieve adequate vegetation cover for watershed protection & plant vigor.				
	Maintain water quality & quantity for resource needs. Secure sufficient water rights to provide for resource management.				
Fire	Provide a level of protection from wildfire that will result in the least total cost & will generally enhance resource conditions of the vegetation. Use prescribed fire when possible to enhance resource conditions.				
Access	Provide administrative & public access, where possible. Maintain roads to a level of minimum standards for public safety.				

Management Guidance for Area H: Emphasis on Public Land Disposal

Management of these areas will be for the disposal of the public lands; these areas will be subjected to additional screening and clearances before any tracts identified for disposal in this plan may be transferred from BLM control. These activities include mineral assessment, cultural resource clearances, environmental analysis, appraisal and similar site-specific actions. Little or no public funds will be spent upon these tracts for resource management; funds would only be spent to correct public health and safety problems or to correct severe resource conditions which cannot be allowed to continue.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Provide cultural resource inventories & clearances so disposal of the tracts can occur. Pending disposal, manage the cultural resources under present laws & regulations.				
Recreation	Provide for very limited dispersed recreation activity. Allow motorized ORV use. Establish site-specific visual quality objectives & design guidelines for landscape development projects during activity planning.			Consider disposal of the Indian Springs site to CDOW as part of their Mike Young property management. Also consider CDOW cooperatively managing those heavily used hunter camp sites along the road between Miramonte Reservoir & Indian Springs (near Hamilton Mesa).	Consider disposal of the Indian Springs site to CDOW as part of their Mike Young property management. Also consider CDOW cooperatively managing those heavily used hunter camp sites along the road between Miramonte Reservoir & Indian Springs (near Hamilton Mesa).
Wildlife	Provide for T&E species inventories & clearance prior to disposal.				
Livestock Management	Allow limited management of the rangeland to occur. Spend no public funds on rangeland improvements. Complete procedural notifications to grazing permittees.				
Forestry	Allow timber to be harvested & forest products to be used.				

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Minerals	Continue to manage the mineral program for development. Retain all mineral rights unless an exception can be documented for transferring the mineral rights.		Transfer all mineral rights with the surface unless: (1) mineral values can be documented to justify retaining the mineral rights, or (2) transferring the mineral rights is prevented by law or regulation.	Transfer all mineral rights with the surface unless: (1) mineral values can be documented to justify retaining the mineral rights, or (2) transferring the mineral rights is prevented by law or regulation.	Transfer all mineral rights with the surface unless: (1) mineral values can be documented to justify retaining the mineral rights, or (2) transferring the mineral rights is prevented by law or regulation.
Lands	Provide for disposal of the public lands. Major utility corridors would be allowed. Allow other land actions to proceed, especially when there is a clear & significant public need.	Allow approx. 16,000 acres for land disposal (through sales, exchanges, or any other title transfer means).	Allow approx. 18,000 acres for land disposal (through sales, exchanges, or any other title transfer means).	Allow approx. 33,000 acres for land disposal (through sales, exchanges, or any other title transfer means).	Allow approx. 21,800 acres for land disposal (through sales, exchanges, or any other title transfer means).
Soils and Water	Maintain soil productivity, minimize man-caused soil erosion & maintain a minimum amount of vegetation cover for watershed protection. Maintain present water quality & quantity. Do not acquire water rights for resource needs unless an exception can be documented. Land disposals must be in conformance with Executive Order (E.O.) 11988 - Floodplain Management.				
Fire	Provide for a limited level of fire management. Suppress wildfires which may be threatening adjacent private, state or Federal property.				
Access	Acquire no access to these tracts unless an exception can be documented. Provide very little or no maintenance of roads. Reserve access rights across parcels when needed for public or resource management.				

Management Guidance for Area 1: Emphasis on Wild Horses

Management direction will emphasize managing the wild horse herds present on public land by providing necessary forage and water. Some investments would probably occur to enhance the habitat for the horses and also to reduce conflicts with other uses in the area. Wild horse management plans will be developed. Reducing livestock and possibly wildlife may need to occur to maintain forage production and vigor. Dispersed recreation, including wild horse viewing, will continue. Woodland products will be made available on a limited basis. Fire will be used to enhance forage production.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Protect important cultural resource properties.				
Recreation	Manage for dispersed recreation as the primary recreation activity. Encourage nonmotorized recreation activities such as wild horse viewing, hiking, etc. Establish site-specific visual quality objectives & design guidelines for landscape development projects during activity planning.				
Wildlife	Protect T&E species & maintain or improve their habitat. Provide minimal investments to enhance key wildlife species.		Provide sufficient forage for wintering big game species in the Spring Creek herd area.		
Livestock Management	Manage livestock to reduce or eliminate conflicts with wild horses. Maintain forage in fair condition with an upward trend. All livestock waters should be provided year round. Reduce numbers or season-of-use to eliminate forage competition. Assure that all range projects are compatible with wild horse use. Restrict licensing of domestic horses in wild horse areas.				
Wild Horses	Develop a site-specific management plan for the wild horses. Develop necessary improvements (fences, waters, vegetation treatments, etc.) for the long-term management of the herd. Maintain forage in a fair condition with an upward trend.	Continue limited management of 100 horses in the Spring Creek Basin (35,000 acres) & 21 horses in the Naturita Ridge area (8,000 acres).	Intensively manage for 75 horses (carrying capacity) in the Spring Creek Basin. Manage for 50 horses in the Naturita Ridge area. Designate both as horse ranges. Develop herd management plan & implement necessary improvements (i.e., fences & water developments).	Remove all wild horses in the planning area.	Remove all wild horses in the planning area.

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Forestry	Manage the forest lands to enhance the vegetation condition for the wild horses & for insect & disease control.				
Minerals	Allow mineral development in all areas not withdrawn from mineral entry. Provide protective stipulations to limit impacts to wild horses.				
Lands	Allow for disposal of parcels of public land not needed for wild horse management. Major utility corridors would be allowed with protective stipulations to prevent or limit impacts to the wild horses. Allow other land actions, including acquisition or exchange, when they will result in minimal adverse impacts, when they will be beneficial to wild horse management, or when there is a clear & significant public need.				
Soils and Water	Maintain soil productivity, minimize man-caused soil erosion & strive to achieve vegetation cover for watershed protection & plant vigor. Maintain water quality & quantity for resource needs. Secure water rights to provide for management needs.				
Fire	Provide a level of protection from wildfire that will result in the least total cost & that will generally enhance wild horse management. Use prescribed fire when possible to enhance vegetation production.				
Access	Provide administrative & public access to public land to enhance wild horse viewing & management. Provide maintenance of roads to a level of minimum standards for user safety.				

Management Guidance for Area J: Emphasis on Forestry and Wood Products

This guidance is designed to increase the production and utilization of wood fiber, firewood, post and poles. Emphasis is upon improved wood production and utilization resulting in extensive modification of tree and other vegetation cover. Investments may be made for forest management activities. Investments (in other emphasis areas) that are commensurate with level wood fiber production will be made. Opportunities will generally be moderate for wildlife management and for dispersed recreation. Livestock grazing will occur; however, disruptions may occur due to timber management actions or objectives.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Protect important cultural resource properties.				
Recreation	Manage for dispersed recreation as the primary recreation activity. Allow motorized ORV use. Establish site-specific visual quality objectives and design guidelines for landscape development projects during activity planning.				
Wildlife	Protect T&E species & maintain or improve their habitat. Provide investments to enhance wildlife species which will benefit from uneven-aged timber management.	Coordinate efforts on a case-by-case basis to ensure aquatic/riparian resources are protected &, in some cases, improved.	Coordinate efforts on a case-by-case basis to ensure aquatic/riparian resources are protected &, in some cases, improved.	Coordinate efforts on a case-by-case basis to ensure aquatic/riparian resources are protected &, in some cases, improved.	Coordinate efforts on a case-by-case basis to ensure aquatic/riparian resources are protected &, in some cases, improved.
Livestock Management	Allow livestock grazing on those areas & times when it will not have negative effects on timber management operations & objectives for the area. Range vegetation treatments will generally not be allowed in timber areas. Range improvements will be designed to minimize conflicts with forest emphasis.				
Forestry	Manage lands suitable for timber production. Invest necessary funds to provide for intensive management of the forest resource. Provide firewood, Christmas trees, & other wood products.	Manage timber species on all available & capable lands & pinyon-juniper with a combination of even & uneven-age systems. Manage aspen under an even-age system. Limit open patchcuts to 20 acres or less	Manage timber species on all available & capable lands & pinyon-juniper with a combination of even & uneven-age systems. Manage aspen for maximum timber production & to favor wildlife management (80-yr	Manage timber species on all available & capable lands & pinyon-juniper with a combination of even & uneven-age systems. Manage aspen under an even-age system. Limit open patchcuts to 20 acres or less in commercial	Manage timber species on all available & capable lands & pinyon-juniper with a combination of even & uneven-age systems. Manage aspen under an even-age system. Limit open patchcuts to 20 acres or less in commercial

Resource/ Activity	General Guidance	Specific Management Direction: Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Forestry (continued)		In commercial forest types & 40 acres in woodland types. Regenerate all patchcuts, shelterwood, & selection harvest cuts, naturally or artificially, within 15 years.	rotation). Clearcut aspen in blocks up to 20 acres. Clearcut entire clones. Limit open patchcuts to 20 acres or less in commercial forest types & 40 acres in woodland types. Regenerate all patchcuts, shelterwood, & selection harvest cuts, naturally or artificially, within 15 years.	forest types & 40 acres in woodland types. Regenerate all patchcuts, shelterwood, & selection harvest cuts, naturally or artificially, within 15 years. Continue management of all operable woodland & commercial sawtimber in other emphasis areas.	forest types & 40 acres in woodland types. Regenerate all patchcuts, shelterwood, & selection harvest cuts, naturally or artificially, within 15 years. Continue management of all operable woodland & commercial sawtimber in other emphasis areas.
		Continue intensive management on approx. 9,540 acres of forest lands. The estimated allowable harvest would be 5.6 million board feet (MMBF) per decade.	Manage approx. 7,930 acres for intensive forest management. Estimated allowable harvest would be 4.7 MMBF per decade.	Manage approx. 11,220 acres for intensive forest management. Estimated allowable harvest would be 6.6 MMBF per decade.	Manage approx. 10,960 acres for intensive forest management. Estimated allowable harvest would be 6.5 MMBF per decade.
		Continue to provide woodland products (firewood, posts, poles, etc.).	Manage approx. 35,170 acres to provide woodland products (firewood, posts, poles, etc.). Estimated allowable harvest would be 5.3 MMBF (10,600 cords).	Manage approx. 42,130 acres to provide woodland products (firewood, posts, poles, etc.). Estimated allowable harvest would be 6.4 MMBF (12,800 cords).	Manage approx. 42,130 acres to provide woodland products (firewood, posts, poles, etc.). Estimated allowable harvest would be 6.4 MMBF (12,800 cords) per decade.
Minerals	Allow mineral development in all areas not withdrawn from mineral entry. Provide protective stipulations to limit impacts to the forest resource.				
Lands	Allow for disposal of parcels of public land not needed for forest management. Acquire or exchange lands when forest management will be enhanced. Major utility corridors would generally not be allowed in commercial forestry but would be allowed in woodland & exceptions could occur with specific analysis. Allow other land actions when they will result in minimal adverse impacts, when they will be beneficial to forest management, or when there is a clear & significant public need.				

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Soils and Water	Maintain soil productivity, minimize man-caused soil erosion & ensure utilization of forestry practices which will provide for minimal soil losses. Maintain water quality & quantity for resource needs. Timber harvesting & associated activities will be conducted in a manner that will not degrade the water quality (from both point & nonpoint sources) below the Colorado Department of Health & Water Quality Standards & Classifications.				
Fire	Provide a level of protection from wildfire that will result in a least total cost & will enhance forest resources. Use prescribed fire when possible to enhance forest management objectives.				
Access	Provide administrative and, where needed, public access to public land to enhance the forest management. Provide necessary maintenance of roads to ensure timber management practices can occur as planned.				

Management Guidance for Area K: Emphasis on Soils and Water

Management direction will emphasize improving water quality and soil stability. Resource data indicates that significant water quality problems exist in some areas and management action may improve the existing situation. In addition, soil erosion or fragile soils exist that are in need of more intensive management. Other resource uses will occur to the extent that they are compatible with the water and soil program direction for the specific areas. Uses by surface-disturbing activities may be limited or denied to improve resource conditions. Livestock grazing will be allowed but possibly at a reduced level; ORV use would be limited or excluded. Other resources, such as wildlife, cultural, etc., would be protected or enhanced under this emphasis area.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Protect important cultural resource properties.				
Recreation	Manage for dispersed recreation as the primary recreation activity. Permit yearlong, nonmotorized recreation activities throughout the area. Establish site-specific visual quality objectives & design guidelines for landscape development projects during activity planning.			Limit ORV use to existing roads & trails in the Disappointment Valley emphasis area.	Limit ORV use to existing roads & trails in the Disappointment Valley emphasis area.
Wildlife	Protect T&E & sensitive species habitat. Maintain or improve wildlife habitat through interdisciplinary design of water or vegetation improvements & maintenance of diversity of vegetation. Allow wildlife habitat improvements that are compatible with the goals of the soils & water program for specific areas.				
Livestock Management	Manage suitable vegetation types under low to moderate intensity for livestock production with the intent to use available forage & maintain plant vigor. Reduce the number or season-of-use for livestock where needed		Provide intensive grazing management in the Disappointment Valley to limit use of forage species & limit spring grazing to improve salinity & erosion problems.	Provide intensive grazing management in the Disappointment Valley to limit use of forage species & limit spring grazing to improve salinity & erosion problems.	Provide intensive grazing management in the Disappointment Valley to limit use of forage species & limit spring grazing to improve salinity & erosion problems.

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Livestock Management (continued)	to achieve soils & water program objectives. Maintain or improve range condition by soils & water improvements & through diversifying the vegetation.				
Forestry	Manage forest products & woodlands to meet the goals & objectives of the soil & water program for the specific areas.				
Minerals	Allow for mineral development on all areas not specifically withdrawn from development. Provide protective stipulations to limit impacts to other resource values.				
Lands	Allow for disposal of parcels of land not identified for soils & water management. Acquire or exchange land when soils & water management will be enhanced. Major utility corridors will be allowed but would be subjected to restrictive stipulations to protect fragile soils & water quality. Allow other land actions when they will result in minimal adverse impacts, when they will be beneficial to soils & water management, or when there is a clear & significant public need.				
Soils and Water	Maintain or improve water quality & quantity. Encourage development of visual design standards & necessary erosion control structures, vegetation improvements, or salinity reduction measures to improve water quality.	Protect 4,700 acres in Boulder Gulch watershed to ensure water quality for Silverton. Protect water quality in aquifers used for domestic & municipal purposes in the Dry Creek Basin & Tabeguache Creek watersheds.	Protect 4,700 acres in Boulder Gulch watershed to ensure water quality for Silverton. Protect water quality in aquifers used for domestic & municipal purposes in the Dry Creek Basin & Tabeguache Creek watersheds.	Protect 4,700 acres in Boulder Gulch watershed to ensure water quality for Silverton. Protect water quality in aquifers used for domestic & municipal purposes in the Dry Creek Basin & Tabeguache Creek watersheds.	Protect 4,700 acres in Boulder Gulch watershed to ensure water quality for Silverton. Protect water quality in aquifers used for domestic & municipal purposes in the Dry Creek Basin & Tabeguache Creek watersheds.

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Soils and Water	Develop necessary soil protection measures to reduce or prevent accelerated future erosion from fragile sites. Maintain or improve soil productivity, minimize man-caused erosion & maintain vegetation for watershed protection & plant vigor.		Manage 78,000 acres in the following watersheds to reduce erosion and sediment yield: Bridge Canyon Broad Canyon Burn Canyon Disappointment Valley Dry Creek Basin Gypsum Valley Hovenweep Canyon Mud Spring Draw Negro Canyon Paradox Valley Ross Fort Park Yellowjacket Canyon	Manage 50,000 acres in Disappointment Valley & Dry Creek Basin to reduce erosion & sediment.	Manage 65,000 acres in the following watersheds to reduce erosion & sediment yield: Big Gypsum Valley Disappointment Valley Dry Creek Basin Paradox Valley
			Develop watershed management plans for all erosion & salinity areas.	Develop watershed management plans for all erosion & salinity areas.	Develop watershed management plans for all erosion & salinity areas.
			Reclaim 20 pollution sources (heavy metals) in the Upper Animas River drainage.	Reclaim 5 pollution sources (heavy metals) in the Upper Animas River drainage.	Reclaim 5 pollution sources (heavy metals) in the Upper Animas River drainage.
			Manage 30,000 acres in Disappointment Valley & Yellowjacket Canyon to reduce salinity in the Colorado River.	Manage 50,000 acres in Disappointment Valley & Yellowjacket Canyon to reduce salinity in the Colorado River.	Manage 46,000 acres in Disappointment Valley to reduce salinity & erosion in the Colorado River.
			Approx. cost of this erosion & salinity management would be $650,000.	Approx. cost of this erosion & salinity management would be $375,000.	Approx. cost of this erosion & salinity management is $450,000.
Fire	Provide level of protection from wildfire that will result in least total cost & will generally enhance soils & water values. Use prescribed fire when possible to enhance soil or water conditions.				
Access	Provide administrative access to public land for management of the soil & water resources. Provide maintenance to roads or trails to reduce erosion.				

Management Guidance for Area L: Emphasis on Areas of Critical Environmental Concern (ACECs)

Management direction will emphasize the areas of public land where special management attention is required. This management should be completed without unnecessarily or unreasonably restricting public land users from purposes that are compatible with such protection.

The proposed Anasazi Culture Multiple Use Area ACEC contains important cultural, mineral, recreation, range, and wildlife resources. The area represents the focus of the northern Anasazi development, with more than 100 sites per square mile in many areas, which represents the highest known archaeologic site density per acre of any area in the nation. The total number of sites on public lands here is estimated nearly 20,000. Many of them cover 10 acres or more. Large oil and gas and carbon dioxide (CO_2) reserves are also contained within the area. Shell Oil Company has made an important investment in the CO_2 resources, with a project life of more than 30 years. The public land within the ACEC provides forage used by livestock and wildlife. The increased mineral development presents a challenge to BLM to provide high quality habitat for the livestock and wildlife dependent upon public lands. Population growth places increased pressure for recreation pursuits on the public lands. These opportunities need to be provided, while emphasizing the cultural and mineral values.

Management Direction for Other Resource Values

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Cultural	Manage the prehistoric or historic values where appropriate. Provide intensive protection of cultural resources from vandals & pot hunters through increased surveillance & law enforcement. Intensify public education for interpretation & recognition of the sensitivity of the resource. Provide for intensive inventory of the cultural resources to more effectively provide protection. A cultural monitor may be required on all surface-disturbing activities to protect subsurface resources.				Manage the Anasazi Heritage Center. Emphasize cultural management on the following areas: Cahone Canyon Cannonball Ruin Cow Mesa Cross Canyon East Rock Canyon Escalante-Dominguez Ruins Hamilton Mesa Lightning Tree Tower Lowry Ruin McLean Basin Towers Mockingbird Mesa Painted Hand Petroglyphs Painted Hand Ruin Sand Canyon Squaw/Papoose Canyon
Recreation	Manage recreational opportunities according to ACEC guidelines for each area. Establish site-specific visual quality objectives and design guidelines for landscape development projects during activity planning.				Close Cross, Cahone, and Squaw/Papoose canyons to ORVs. Provide a semiprimitive recreation experience. Manage Cross, Cahone, and Squaw/Papoose canyons under VRM Class II guidelines. Manage the McElmo Research Natural Area for its special research value.

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Wildlife	Manage important or critical habitat for T&E, sensitive, or species of special importance to maintain a viable population level of each species.				Invest wildlife funds for structural improvements and vegetation restoration projects to improve the following high priority riparian habitat: Cross, Cow, Calone, Hovenweep, and Bridge canyons.
Livestock Management	Manage livestock under low to moderate intensity to use available forage & maintain plant vigor while not degrading any present ACEC values.				Develop AMPs on those 'I' category allotments within ACECs. Consider cultural, mineral, wildlife, and recreation values during development.
Forestry	Manage lands suitable for timber & woodland production to enhance ACEC values & to maintain healthy stand conditions.				
Minerals	Manage mineral development to limit conflict with present ACEC values. When possible, schedule activities so conflicts are minimized & site rehabilitation is addressed within ACEC guidelines. Some mineral development may need to be limited or excluded for proper ACEC management.				Continue present protection & no-surface occupancy stipulations for oil & gas leasing on Battle Rock; Easter Ruin; Sand & East Rock canyons; Cannonball, Lowry, Lightning Tree Tower, Seven Towers & Dominguez-Escalante ruins; Hovenweep buffer; McLean Basin Towers; & Painted Hand Petroglyphs. Provide for no-surface occupancy stipulations for oil & gas leasing on: Calone, Cross, & Squaw/Papoose canyons & Painted Hand Ruin.
Lands	Disposal of isolated tracts not needed for future public land management & that does not contain important resource values may be accomplished after site-specific reviews on a case-by-case basis.				

Resource/ Activity	General Guidance	Specific Management Direction			
		Current Management	Resource Conservation	Resource Utilization	Proposed Plan
Lands (continued)	Major utility corridors will be considered on a case-by-case basis. Acquisition, exchange and other lands actions will be allowed only if they are designed to meet the ACEC management objective, or when there is a clear & significant public need.				
Soils and Water	Maintain soil productivity, minimize man-caused erosion, & maintain vegetation condition & plant vigor for watershed protection. Maintain water quality & quantity for resource needs.				
Fire	Use fire management techniques that maintain the ACEC values. Wildfire suppression would generally not occur unless needed to protect ACEC values.				
Access	Provide administrative & public access where needed for ACEC management. Maintenance will be provided on only those roads needed for management purposes.				Limit public access in Mockingbird Mesa and Sand and East Roc canyons to foot or horse only and restrict vehicle access to authorized vehicles only. Acquire administrative access into Sand & Yellowjacket canyons & Cannonball Mesa.

APPENDIX SIX

BEST MANAGEMENT PRACTICES

(See Draft RMP)

APPENDIX SEVEN

MONITORING AND EVALUATING

(See Draft RMP)

APPENDIX EIGHT

ECONOMICS AND SOCIOECONOMICS

(See Draft RMP)

APPENDIX NINE-A

ALLOTMENT CATEGORIZATION

(See Draft RMP)

APPENDIX NINE-B

TYPICAL RANGE DEVELOPMENTS

(See Draft RMP)

APPENDIX NINE-C

POSSIBLE GRAZING SYSTEMS

(See Draft RMP)

APPENDIX NINE-D

"I" CATEGORY ALLOTMENTS--PROBLEMS AND MANAGEMENT ACTIONS

(See Draft RMP)

APPENDIX NINE-E

AUMs BY ALTERNATIVE BY ALLOTMENT

Introduction

Table 9-E (see the Draft RMP) displays AUMs by alternative by allotment; the following assumptions were made in developing these figures:

1. Under the Resource Conservation, Resource Utilization, and Preferred alternatives, the figures should reflect the suggested carrying capacity plus additional AUMs that would be gained through instituting effective grazing management practices and vegetation manipulations.

2. The figures shown under the Current Management Alternative (No Action Alternative) correspond to current active preference and a 3-year average of actual use.

3. Adequate funding and manpower would be available to implement each alternative.

4. Implementing all facilities and vegetation manipulations would be accomplished in the term of the plan.

5. The far right column of Table 9-E under the Preferred Alternative (present estimated capacity in AUMs) reflects the vegetation inventory (see Appendix Nine-G) conducted within the planning area. It will be used as baseline data in conjunction with present and future monitoring to determine use adjustments.

Under the Preferred Alternative column, note the following changes in AUMs in the Final:

Allotment number	AUMs (Draft)	AUMs (Final)
7004	162	84
7016	5,998	6,498
7046	966	1,066
7210	40	36
Total AUMs (all allotments)	42,771	43,289

APPENDIX NINE-F

POTENTIAL RANGE IMPROVEMENTS

(See Draft RMP)

APPENDIX NINE-G

METHODS USED IN RANGE ANALYSIS

Methods for Vegetation Inventory

Vegetation inventory on public land in the San Juan-San Miguel planning area was conducted beginning in 1981 and field work was completed in 1982. The data collected have been used in this RMP to classify sites and to determine the vegetation condition of plant communities and the composition, productivity, and suitability of the land for livestock grazing.

Classification

Sites dominated by grassland, shrub, or mixture of grass/shrub vegetation were classified as range sites according to the SCS. This system interprets the site based upon geographic region; soil characteristics, including texture and depth; mean annual precipitation; and climax vegetation, to the extent that it can be interpreted for the site. Most pinyon-juniper dominated sites were classified as such and interpreted according to woodland sites developed by the SCS.

Vegetation Condition

Inventory crews first identified and delineated the boundaries for the sites to be inspected. Estimates of plant species composition, based on weight, were then made for the plant communities found on each site. The present species composition was compared to the potential climax composition for the site. A condition rating was computed for the vegetation on each site; it represents the extent to which the site differs from potential climax. While this condition rating is often referred to as range condition, this RMP refers to the rating as vegetation condition.

Four condition classes are set forth by the SCS. A plant community in excellent condition exhibits little change in species composition when compared to the potential climax plant community for the site. Between 100 percent and 75 percent of the kinds and amounts of vegetation produced would be found in climax. Good condition communities produce between 74 percent and 50 percent of the kinds and amounts of vegetation found in climax. Fair condition communities produce between 49 percent and 25 percent of the kinds and amounts of vegetation found in climax. Poor condition communities produce between 25 percent and 0 percent of the kinds and amounts of vegetation found in climax. A fifth condition class of unclassified was used in the inventory to designate vegetation communities that could not be legitimately compared to a climax community. The unclassified rating was applied to areas that had been plowed and seeded, areas where native vegetation has been manipulated by mechanical or chemical means, areas of pinyon-juniper woodland for which range sites were not developed, or areas of undergrowth communities having dense forest canopies.

Suitability

The suitability for livestock grazing was assessed. One of three ratings was assigned by allotment: suitable, no environmental factors restricting livestock access and use of the site; potentially suitable, environmental factors presently limit livestock

access or use, but changes could be made that would make the site suitable; and unsuitable, environmental factors presently limit livestock access or use that cannot be changed. The major criteria used to rate range land suitability are: distance from water, slope or other physical barriers, and forage production.

Carrying Capacity Estimates

The weight estimate write-ups were used to determine the percent composition by plant species and the total herbage production by range site. Plant species were divided into forage groups by grasses, forbs, and shrubs. Proper use factors were developed for each plant species by class of grazing animal for cattle, sheep, and big game. The total allowable use by class of grazing animal was determined by range site and totaled for an allotment. The suitability criteria listed above was applied on all areas evaluated. The following forage requirements were used to determine the total allowable use by allotment by grazing animal. An AUM was considered to be 850 lb of air dry forage.

The following forage requirements (air dry forage) were used for other grazing animals:

1. Deer - 90 lb for winter (5 months, November-March)
   115 lb for remainder of year

2. Elk - 300 lb for winter (5 months, November-March)
   375 lb for remainder of year

3. Wild horse - 850 lb yearlong

APPENDIX 9-H
ALLOTMENT CONDITION AND AUTHORIZED USE

Table 9-H. Summary of Allotment Condition and Authorized Use.

Allot. no.	Allotment name	Mgmt. status	Total public acres	Ecological vegetation condition on public lands (acres)				Unclass. or unmapped	Present class livestock	Current season of use	Critical period
				Excellent	Good	Fair	Poor				
Following allotments suitable for Cattle, Horses, or Sheep:											
7000	Upper Disappointment	M	1,996					1,996	C	6/1 - 11/15	
7001	Mailbox Park	I	6,611			408	6,203		S	1/1 - 2/15	4/15 - 5/15
7002	Gypsum Gap	I	2,895			1,061	1,834		S	12/1 - 3/15	4/15 - 5/15
7003	Lee Lands	C	2,062				445	1,617	S	6/1 - 7/15 9/15 - 10/29	
7004	Dolores Canyon	M	2,891		125	518	179	1,996[1/]	C	11/25 - 1/3	
7005	Salt Arroyo	I	10,956			726	10,230		C	11/15 - 2/28	4/15 - 5/15
7006	Gyp Ridge	I	3,155			712	2,166	158[2/]	C	12/1 - 2/28	4/15 - 5/15
7007	Uncompahgre Bench	M	13,702		506	3,043	7,872	149[3/]	C	5/15 - 5/27 11/13 - 12/23	
7008	Twenty-five Mesa	I	5,373			368	4,519	31[4/]	C	10/16 - 12/7	4/15 - 5/15
7009	East Summit Mesa	C	119			42	77		C	4/1 - 5/30 10/16 - 12/30	
7010	Wickson Draw	I	4,441		41	535	3,865		C	11/10 - 4/30	4/15 - 5/15
7011	Ayers Individual	M	4,593			158	67	4,368	C	4/19 - 5/18	
7012	Lion Canyon	C	313					313	C	4/1 - 10/31	
7013	San Miguel River	C	937					937	C	5/16 - 6/15 10/16 - 11/15	
7014	Mesa Creek	I	60,257		2,063	14,131	33,082	10,128[5/]	C	6/15 - 11/10	4/15 - 5/15
7015	Bush Canyon	M	4,997			67	1,957	2,630[6/]	C	3/1 - 5/6 10/26 - 12/31	
7016	Dry Creek Basin	I	114,902	1,525	3,902	35,207	59,043	8,990[7/]	S,C,H	3/1 - 2/28	4/15 - 5/15
7017	McKenna Peak	M	1,025			642	383		C	5/1 - 10/31	
7018	Maverick Draw	I	1,993			45	1,656	173[8/]	C	11/2 - 12/1	4/15 - 5/15

Treated acres:
1/ 73 2/ 119 3/ 2,132 4/ 455 5/ 853 6/ 343 7/ 6,235 8/ 119

Table 9-H. (Continued)

Allot. no.	Allotment name	Mgmt. status	Total public acres	Ecological vegetation condition on public lands (acres)				Unclass. or unmapped	Present class livestock	Current season of use	Critical period
				Excellent	Good	Fair	Poor				
7019	Summit Point	C	1,691			94	1,307	290[1/]	C	7/1 - 10/31 10/16 - 12/1	
7020	Roc Creek	C	1,268			680	93	495	C	11/1 - 3/31	
7021	Rawlings Individual	C	353					353	C	5/1 - 10/31	
7022	Burn Canyon	I	1,788			271	1,045	247[2/]	S	12/20 - 2/19	4/15 - 5/15
7023	Sharp Canyon	I	162					162	C	5/1 - 9/30	
7024	Lillylands-West	M	2,387			1,902	50	234[3/]	C	1/17 - 3/31	
7025	Island Mesa	I	25,180		170	8,673	12,533	3,534	C	11/1 - 5/31	5/1 - 5/30
7026	La Sal Creek	C	179					179	C	5/1 - 9/30	
7027	Coke Ovens	I	7,660	22	64	4,245	1,431	755[4/]	C	2/1 - 3/31	4/15 - 5/15
7028	Warden Draw	I	4,225			20	2,072	2,133	C	5/1 - 5/31 10/16 - 12/1	5/1 - 5/30
7029	Lone Mesa	M	1,421				1,288	133	C	5/19 - 6/30 11/5 - 11/9	
7031	Tabeguache Creek	I	17,912		69	7,228	7,976	2,639	C	5/15 - 6/14 1/1 - 3/31	4/15 - 5/15
7032	Sawtooth	I	23,236		758	6,771	11,981	3,726	C	1/1 - 4/30	4/15 - 5/15
7033	Buckeye	M	835		34	353	321	127	C	6/1 - 9/30	
7034	Slick Rock	I	26,831		825	2,797	19,461	2,678[5/]	C,H	10/16 - 5/15	4/15 - 5/15
7035	Naturita Ridge	I	10,555		185	6,210	1,363	1,184[6/]	S	12/5 - 3/20	4/15 - 5/15
7036	Disappointment	I	61,515		5,639	21,502	19,238	10,962[7/]	C	11/1 - 5/31	4/15 - 5/15
7037	Davis Mesa	I	2,956			223	1,928	329[8/]	C	12/1 - 4/30	4/15 - 5/15
7038	Spud Patch	M	9,150		591	846	1,641	3,670[9/]	C	5/16 - 11/15	
7039	Ute Ranch	I	33,275	9	1,088	5,763	12,733	9,835[10/]	C	3/3 - 5/31 11/4 - 2/24	4/15 - 5/15
7040	Pinion	C	541					541	C	5/1 - 6/30	
7041	Young-DOW	I	12,237			4,087	7,140	344[11/]			
7042	Doble Canyon Individual	I	2,647		147	2,353		147	C	10/16 - 12/15	4/15 - 5/15

Treated acres:
1/ 290 2/ 225 3/ 201 4/ 1,143 5/ 1,070 6/ 1,613 7/ 4,174 8/ 476 9/ 2,402
10/ 2,564 11/ 666

Table 9-H. (Continued)

Allot. no.	Allotment name	Mgmt. status	Total public acres	Ecological vegetation condition on public lands (acres)				Unclass. or unmapped	Present class livestock	Current season of use	Critical period
				Excellent	Good	Fair	Poor				
7043	South Mountain	C	881				857	24	C	6/19 - 10/9	
7044	Lion Creek Basin	M	5,247			302	3,857	252[1/]	C	5/15 - 6/24	
7045	Horse Park	I	6,647				6,647		C	5/1 - 10/31	4/15 - 5/15
7046	Indian Valley	I	18,346		392	1,462	14,130	2,362[2/]	C	1/29 - 5/31	4/15 - 5/15
7047	Home Bench	C	1,496			261	1,235		C	4/15 - 6/14	
7048	Wray Mesa	I	48,797		250	7,084	12,317	3,173[3/]	C	11/1 - 5/31	4/15 - 5/15
7049	Desert Claim	C	1,680					1,680	C	5/15 - 10/31 11/15 - 12/20	
7050	Plateau	C	353					353	C	6/1 - 11/30	
7051	Belmear Mountain	C	411				411		C	7/1 - 10/30	
7052	Ryman Creek	C	621				621		C	12/1 - 6/15	
7075	Lavender Exchange of Use	C	1,169			6	256	907	C		
7076	Houser	M	3,163		182	2,110	508	363	C	3/1 - 5/15	
7077	First Park	C	148			28	120		C		
7078	Feedlot	C	510			510			C	11/1 - 4/30	
7079	River	C	1,300			504	643	153	C	12/16 - 5/31	
7080	Rowher Canyon	C	680			652	2	26	C	3/1 - 5/31	
7081	Swain Bench	I	5,422		224	3,722	742	734	C	12/1 - 2/28	4/15 - 5/15
7085	Pocket Individual	C	1,375			1,156	219		C	5/1 - 5/31	
7086	Horse Bench	C	610			405	205		C	5/2 - 5/11	
7087	Colombo	C	215			198		17	C	5/11 - 5/31	
7088	Sundown	C	1,743			1,233	458	52	C	12/27 - 1/26	
7100	Carpenter Ridge Common	M	7,135		303	3,849	1,253	287[4/]	C	5/1 - 6/5	
7101	East Paradox Common	I	16,255	1,845	1,059	5,550	5,452	1,703[5/]	C	1/1 - 2/28	3/1 - 4/15
7102	Sunrise Gulch Common	C	1,597		18	327	1,192	60	C	11/27 - 12/26	
7103	Third Park Common	M	4,270		481	1,796	1,287	0[6/]	C	11/1 - 12/15	
7104	Spencer Lake	C	920			719	201		C	6/16 - 10/31	
7105	Second Park	C	750			358	304	88	C	12/1 - 4/30	

Treated acres:
[1/] 836 [2/] 2,362 [3/] 1,063 [4/] 1,443 [5/] 646 [6/] 706

Table 9-H. (Continued)

Allot. no.	Allotment name	Mgmt. status	Total public acres	Ecological vegetation condition on public lands (acres)				Unclass. or unmapped	Present class livestock	Current season of use	Critical period
				Excellent	Good	Fair	Poor				
7106	Tuttle Draw	C	1,231			20	758	453	C	5/1 - 5/31	
7107	Coal Canyon	M	5,391			401	4,775	24[1/]	C	10/16 - 12/15	
7200	River	C	2,225			2,045	180		C	6/15 - 10/15	
7201	Lillylands	I	7,136			1,402	5,075	117[2/]	S	1/1 - 7/14	4/15 - 5/15
7202	Upper Maverick Draw	C	488			31	457		C	5/1 - 6/1	
										11/10 - 12/25	
7203	Naturita Canyon	C	630			123		507	C	12/17 - 4/15	
7204	Beaver Rim	C	67				53	14	C,H	4/1 - 4/30	
7205	Leopard Creek	C	391				391		C	5/1 - 10/31	
7206	McKee Draw	I	1,562			62	1,043	457	C	5/15 - 6/14	4/15 - 5/15
										11/15 - 12/14	
7207	Big Bear Creek	C	542				287	255	C	5/1 - 6/30	
										9/16 - 11/15	
7208	Upper Mail Box	M	1,429			49	776	104[3/]	C	5/1 - 6/14	
										12/1 - 12/30	
7209	Hamilton Mesa	C	410					410	C	6/1 - 6/30	
7210	Little Maverick Draw	M	1,078				424	654	C	1/1 - 1/31	
7211	Beaver Canyon	C	314					314	C	6/16 - 8/30	
7212	Unallotted	C	120					120			
7213	Unallotted	C	500					500	C	5/16 - 7/15	
7214	Rincone	C	2,280					2,280	C	5/16 - 7/15	
7215	Cone	M	3,243					3,243	C	5/20 - 10/10	
7216	San Miguel Rim	M	679				339	340	S	5/15 - 6/14	
										11/22 - 1/24	
7217	Sawpit Individual	C	1,194					1,194	S	7/16 - 8/15	
7218	Norwood Hill	C	144					144	C	5/1 - 8/31	
7219	Bollinger Ditch	C	349					349	C	6/1 - 9/30	
7220	Williams Ditch	C	57			47		10	H	3/1 - 2/28	
7221	Duroy	C	3,244					3,244	C	6/1 - 10/31	

Treated acres:
[1/] 191 [2/] 542 [3/] 500

Table 9-H. (Continued)

Allot. no.	Allotment name	Mgmt. status	Total public acres	Ecological vegetation condition on public lands (acres)				Unclass. or unmapped	Present class livestock	Current season of use	Critical period
				Excellent	Good	Fair	Poor				
7222	Coventry	I	841					770[1/]	C	5/1 - 6/12	4/15 - 5/15
7223	Little Baldy	M	1,900					1,900	C	5/16 - 7/15 10/16 - 11/30	
7224	High Mesa	M	992			126	79	525[2/]	C	1/15 - 2/25	
7225	Oak Hill	C	42					42	C	6/1 - 11/1	
7226	Summer Camp Creek	C	120			40	80		C	6/15 - 10/14	
7227	Redvale	C	402					402	C	5/1 - 5/15	
7251	Sawdust Gulch	C	280					280	C	4/1 - 12/31	
7252	Buck Canyon	C	10					10	C	6/1 - 10/31	
7253	Alder Creek	C	120					120	C	5/15 - 9/30	
7300	Dry Park	I	4,112			522	142	116[3/]	C	5/10 - 5/31 10/25 - 11/24	4/15 - 5/15
7301	Horsefly Common	M	449				39	410	C	5/27 - 6/26	
7302	Uncompahgre Common	M	387				53	334	C	6/1 - 10/15	
7303	Barkelew Draw Common	I	5,971			144	5,635	116[4/]	C	5/15 - 6/14 10/16 - 11/15	4/15 - 5/15
7305	Beaver Mesa	M	1,143				399	744	C	5/20 - 10/10	
7306	Unallotted	C	560					560			
8000	Unallotted	C	80					80			
8002	Squaw Canyon	I	4,765			77	194	4,494	C	6/1 - 11/1	4/15 - 5/15
8003	Big Canyon	I	1,916				1,709	207	C	5/11 - 9/30	4/15 - 5/15
8004	Dolores River	I	18,334		615	8,205	4,505	4,708[5/]	C	11/16 - 3/15	4/15 - 5/15
8005	Sheep Point AMP	M	4,541			642	56	1,645[6/]	C	6/11 - 10/31	
8006	Todd Individual	C	488			28	88	334[7/]	C,H	5/1 - 11/30	
8007	Cross Canyon	I	29,528			271	1,845	25,388[8/]	C	4/29 - 5/31 12/1 - 2/28	4/15 - 5/15
8008	Ruin Canyon	M	788				50	721[9/]	C	4/20 - 5/30 10/1 - 10/31	

Treated acres:
1/ 71 2/ 262 3/ 3,332 4/ 76 5/ 301 6/ 2,198 7/ 38 8/ 2,024 9/ 17

Table 9-H. (Continued)

Allot. no.	Allotment name	Mgmt. status	Total public acres	Ecological vegetation condition on public lands (acres)				Unclass. or unmapped	Present class livestock	Current season of use	Critical period
				Excellent	Good	Fair	Poor				
8009	Hovenweep Canyon	I	6,122			470	527	5,002[1/]	C	4/16 - 5/30 9/1 - 1/5	4/15 - 5/15
8010	Dry Canyon	C	665				18	647	C	6/1 - 10/31	
8011	Lower McElmo	I	8,662	748	1,010	2,919	3,633	352[2/]	C	12/1 - 4/30	4/15 - 5/15
8012	Cahone Mesa AMP	M	22,925	147	2,519	2,346	1,504	9,425[3/]	C	11/16 - 5/20	
8013	Individual	I	22,699			223	915	18,540[4/]	C	12/16 - 5/30	4/15 - 5/15
8014	Alkali	M	794			73	52	651[5/]	C	12/1 - 4/14	
8015	Dolores	C	297				82	215	C	5/15 - 6/14	
8016	McCabe	C	40					40	C	12/1 - 12/30	
8017	Weber Canyon	C	40					16[6/]	C	5/1 - 12/31	
8018	Yellowjacket	I	5,727		2,092	2,726	771	102[7/]	C	12/1 - 5/20	4/15 - 5/15
8019	Cannonball	I	2,829			1,090	1,739		C	4/1 - 5/10 12/1 - 1/7	4/15 - 5/15
8020	Burro Point AMP	I	9,519	93	199	3,300	1,620	11,075[8/]	C	12/1 - 5/20	4/15 - 5/15
8021	Rock Creek	M	2,443				11	2,432	C	3/25 - 4/9	
8022	Sand Canyon	C	377					377	C	12/1 - 5/30	
8023	Sand Canyon	C	2,264				107	2,157	C	4/16 - 5/31 11/16 - 12/15	
8024	Trail Canyon	M	5,173			75	312	4,741[9/]	C	4/16 - 5/25 11/21 - 1/15	
8025	Aztec Canyon	M	1,830				168	1,060[10/]	C	5/1 - 5/31 11/16 - 12/15	
8026	Mathias	C	218					218	C,S	10/1 - 11/30	
8027	Gawith	C	1,017				168	849	C	11/1 - 12/31	
8028	Mud Creek	C	1,979				370	1,609	C	4/20 - 5/25	
8029	Hurst	C	370				17	290[11/]	C	3/1 - 11/30	
8030	Bement	C	480				44	436	C	10/1 - 10/31	
8031	Noland	C	260				73	187	C	6/1 - 7/31	
8032	N. Menefee Mountain	C	505					480[12/]	C	6/1 - 9/1	

Treated acres:
[1/] 123 [2/] 352 [3/] 6,984 [4/] 3,021 [5/] 18 [6/] 24 [7/] 26 [8/] 3,232
[9/] 45 [10/] 602 [11/] 63 [12/] 25

Table 9-H. (Continued)

Allot. no.	Allotment name	Mgmt. status	Total public acres	Ecological vegetation condition on public lands (acres)				Unclass. or unmapped	Present class livestock	Current season of use	Critical period
				Excellent	Good	Fair	Poor				
8033	Veach	I	6,135			597	4,354	1,184	C	12/1 - 5/20	4/15 - 5/15
8034	Willow Creek	C	880				46	434[1/]	C	5/1 - 6/3	
8035	Hamilton Mesa	I	7,577		302	4,870	1,690	715	C	12/15 - 5/15	4/15 - 5/15
8036	Schuster	C	294			294			C	4/16 - 5/31	
										11/1 - 12/10	
8037	Ute Mountain	C	334			168	166		C	4/16 - 5/31	
										12/1 - 12/31	
8038	Monument	C	620					620	C	4/1 - 5/1	
										10/1 - 11/1	
8039	Lower Aztec Canyon	M	500				10	590	C	2/1 - 4/30	
8040	Unallotted	M	972			295	352	325			
8041	Burro Individual	M	327			72	93	81[2/]	C	12/1 - 5/15	
8042	Mancos River	M	899	97	57	37	8	700	C	12/1 - 4/20	
8043	West Weber Mountain	C	3,227					3,139[3/]	C	9/1 - 9/30	
8044	Weber Mountain	C	708					708	C	1/1 - 4/30	
8045	Doerfer	C	975				74	901	C	5/1 - 5/31	
										10/1 - 11/30	
8046	East Canyon	C	2,350				52	2,224[4/]	C,H	3/1 - 2/28	
8047	Flint Rock Point	C	340					340	C	8/1 - 9/24	
8048	Redd Lease	M	3,294				167	3,127	S	5/20 - 6/10	
										10/1 - 10/10	
8049	Ayers	C	200			62	8	130	C	5/1 - 5/31	
										10/1 - 11/31	
8050	Unallotted	C	100					100			
8051	Unallotted	C	1,080					1,080			
8052	Individual	M	2,567			6	343	1,483[5/]	S	12/1 - 3/12	
8053	Mesa Verde	M	5,585				882	4,523[6/]	C,S	12/1 - 5/31	
8054	Lanier	C	486				486		C	6/1 - 10/31	
8055	Goodman Gulch	C	319				38	281	C	3/1 - 4/15	
										10/1 - 11/15	

Treated acres:
1/ 400 2/ 81 3/ 88 4/ 74 5/ 735 6/ 180

Table 9-H. (Continued)

Allot. no.	Allotment name	Mgmt. status	Total public acres	Ecological vegetation condition on public lands (acres)				Unclass. or unmapped	Present class livestock	Current season of use	Critical period
				Excellent	Good	Fair	Poor				
8056	Individual	C	40				30	10	C	5/21 - 6/5	
8057	Yellowjacket Canyon	I	2,563		125	197	637	1,604	C	11/20 - 4/5	4/15 - 5/15
8058	Plateau Creek	C	890			188	702		C	6/1 - 11/20	
8059	Davis	C	40				30	10	C	9/1 - 11/30	
8060	Everett	C	40				15	25	C	6/1 - 9/31	
8061	Robb Individual	C	30				8	17[1/]	S	10/1 - 10/31	
8063	Sandrock	M	513					513	C	6/1 - 10/15	
8064	Upper Trail Canyon	C	160			46	29	85	C	11/1 - 2/28	
8065	Papoose Canyon	M	1,085					848[2/]	C	2/1 - 3/31	
										9/16 - 11/15	
8066	Flodine Park	I	4,723		143	1,415	3,123	42	C	2/1 - 5/30	4/15 - 5/15
8067	Unallotted	C	487					447[3/]			
8068	Snyder	M	1,199		717	253	229		C	1/16 - 3/31	
8069	Morgan Pasture	C	1,410				201	1,201[4/]	C	4/1 - 6/1	
8400	Canby	C	86		24			0[5/]	C	6/1 - 10/30	
8401	Mahan	M	639		223			111[6/]	C	5/20 - 6/10	
										10/20 - 11/4	
8402	Eldridge	C	440					440	C	5/1 - 10/31	
8403	Boggs	M	2,187				497	1,250[7/]	C	6/16 - 9/15	
8404	Greer	C	579					579	C	6/1 - 11/30	
8405	Montoya	C	227		49		20	158	C	6/1 - 10/31	
8406	Scott Individual	C	40		23			17	S	5/1 - 6/30	
8407	Huntington	C	714		330	36	100	248	C	5/1 - 9/30	
8408	Patcheck	C	343				44	299	C	6/1 - 10/15	
8409	Lightner	M	633			28	264	341	C	6/1 - 10/22	
8411	Jenkins	C	80					80	C	6/1 - 10/31	
8412	Palmer	C	745					745	C,S	5/1 - 10/31	
8413	Cherry Creek	M	618				104	514	C	6/1 - 8/31	

Treated acres:
1/ 5 2/ 237 3/ 40 4/ 8 5/ 62 6/ 305 7/ 440

Table 9-H. (Continued)

Allot. no.	Allotment name	Mgmt. status	Total public acres	Ecological vegetation condition on public lands (acres)				Unclass. or unmapped	Present class livestock	Current season of use	Critical period
				Excellent	Good	Fair	Poor				
8414	Unallotted	C	360			16		344			
8415	Elderado	C	270			55		215	C	6/1 - 10/15	
8416	Florida River	C	857			38	596	223	C	5/11 - 9/25	
8417	Unallotted	C	170				16	154			
8418	Tonks	C	250					250	C	6/1 - 10/31	
8419	Unallotted	C	210				24	180			
8420	Unallotted	C	92					92			
8422	Lemon Dam	M	699					699			
8423	Lemon Dam	M	407					407	C	8/1 - 9/30	
8424	Willow Creek	M	973		14		110	849	C	7/1 - 10/15	
8425	Spring Gulch	M	2,534					2,534	C	6/1 - 10/30	
8427	Unallotted	C	414					414			
8428	Unallotted	C	280					280			
8429	Wallace Gulch	M	1,847				399	1,448	C	5/1 - 9/30	
8430	Former Keyes	C	160					160	C	6/1 - 10/31	
8431	Gem Village	C	400		32		113	255	C	8/16 - 9/30	
8432	Mankins	C	200					200	C	4/1 - 10/31	
8433	Brown	C	1,594					1,594	C	6/10 - 10/9	
8435	Unallotted	C	566					566			
8437	Unallotted	C	26					26			
8438	Dutton Park	C	40					40	C	5/1 - 9/30	
8439	Unallotted	C	240					240			
8440	Unallotted	C	160					160			
8441	Willow Draw	C	434				342	92	C	7/1 - 9/31	
8442	Willow Draw	C	80					80	C	6/16 - 6/30	
										8/16 - 8/30	
8443	Individual	C	160					160	C	6/1 - 6/30	
8444	Coyote Park	C	80					80	C	6/1 - 6/30	
8445	Coyote Park	C	80					80	C	5/1 - 11/30	
8446	Gomez	M	400			256		144	C	6/15 - 10/1	
8447	Archuleta Mesa	C	160					160	C	9/11 - 10/31	
8448	Archuleta Mesa	M	1,309					1,309	C	6/1 - 10/15	

Table 9-H. (Continued)

Allot. no.	Allotment name	Mgmt. status	Total public acres	Ecological vegetation condition on public lands (acres)				Unclass. or unmapped	Present class livestock	Current season of use	Critical period
				Excellent	Good	Fair	Poor				
8449	Manuel Cruz Estate	C	91					91	C	6/1 - 10/15	
8450	Section 15	M	746				163	583	C	6/1 - 10/31	
8451	Bigbee Brothers	M	831					831	C	5/16 - 9/30	
8452	Chromo Mountain	M	430					430	C	5/16 - 9/30	
8453	Martinez	C	46					46	S	5/1 - 9/30	
8454	Bramwell	C	215					215	C	5/1 - 11/30	
8455	Individual	C	160					160	C	5/1 - 10/31	
8456	Vigil-Abeyta	M	1,317					1,317	C	5/16 - 9/1	
8457	Upper Vigil	M	232					232	C	6/20 - 6/29	
8458	Crowley	C	200					200	C	5/1 - 6/15	
										10/1 - 11/30	
8459	Navajo River	C	404					404	C	5/21 - 10/1	
8460	Canby	C	40				36	4	C	5/16 - 6/30	
8461	Section 15	C	133				111	22	C	6/1 - 10/15	
8462	Section 15	M	931					931	C	6/20 - 11/1	
8463	Vigil Mesa	M	1,052					1,052	C	6/16 - 8/15	
8464	Macht	C	40					40	H	6/1 - 10/31	
Following allotments suitable for Horses or Sheep only:											
*8900	Cement Creek	M	4,181					4,181	S,H	7/10 - 9/30	
*8901	Gladstone	M	2,325					2,325	S,H	7/10 - 9/30	
*8902	Eureka	M	6,221		2,780	1,338		2,053	S,H	7/10 - 9/30	
*8903	Animas River	M	3,072		783	784	131	1,374	S,H	7/10 - 9/30	
*8904	Unallotted	M	1,377					1,377			
*8905	Cunningham Gulch	M	1,738					1,738	S,H	7/10 - 9/30	
*8906	Molas Lake	M	1,876					1,876	S,H	7/10 - 9/30	
*8907	Deer Park	M	3,344					3,344	S,H	7/10 - 9/30	
*8908	American Basin	M	2,650		421	571		1,658	S,H	7/10 - 9/30	

*Silverton allotments were previously covered in the Gunnison Basin-American Flats/Silverton EIS 1982.
Source: BLM Data 1984.

APPENDIX NINE-I

RANGE ASSUMPTIONS

Season-of-Use--Assumptions and Determinations

Critical Periods

Grass season	Low elevation (4,000-6,000 ft)	Medium elevation (6,000-8,000 ft)	High elevation (>8,000 ft)
Cool	3/1 - 4/15	4/15 - 5/15	5/1 - 5/31
Warm	4/15 - 5/15	5/1 - 5/30	5/15 - 6/15

Stipulations

1. Spring use will not be permitted on native ranges during the critical period unless:

   A. A grazing system is implemented which provides critical period rest once every three years (minimum);

   B. A spring use pasture, i.e., crested wheatgrass seeding, is developed to absorb grazing use in meeting the rest requirement.

2. Grazing use during any portion of the critical period will be limited to no more than 30 percent of the total preference and no more than 50 percent utilization of the key forage species current season's growth for that critical period will be permitted.

3. Season-of-use on category "M" and "C" allotments will remain the same as currently permitted until monitoring data indicate a change is necessary. At that time, season-of-use criteria will then apply.

4. It is assumed that range readiness will occur at the end of the critical period and occurs when:

   A. 4" to 6" green leaf on cool season key forage species. Some key cool season species might include.

      a. Indian ricegrass--Oryzopsis hymenoides
      b. Junegrass--Koleria cristata
      c. Squirreltail--Sitanion hystrix
      d. Needle and thread--Stipa comata
      e. Crested wheatgrass--Agropyron cristatum

   B. Soil mantle is dry and firm.

5. Range readiness criteria (no. 4 above) will apply to seedings.

APPENDIX TEN

COMMENTS ON THE DRAFT RMP/EIS AND RESPONSES TO COMMENTS

Appendix Ten of the Final RMP/EIS includes a copy of all the written comments on the DEIS, oral testimony presented at the public hearings held in Durango, Colorado (June 25, 1984); Cortez, Colorado (June 26, 1984); Nucla, Colorado (June 27, 1984); Golden, Colorado (June 28, 1984); and Monticello, Utah (July 2, 1984); and responses to those comments.

Individual comments that required a response have a number assigned to them that corresponds to a response listed in Section B of this appendix. The response number (in parentheses after the letter number) is placed on the left-hand margin adjacent to the comment. If a particular comment is an observation or is in agreement with the text, no response has been made.

A. Comments on the Draft RMP/EIS

The letters appear in the order they were received at the San Juan Resource Area Office. Following the letters are the public hearing transcripts in the order the hearings were held. To reduce the total volume of reprinted materials in the text, extensive attachments to some comment letters that do not raise specific issues have not been included. Also, the public hearing transcripts that are reprinted do not include all of the opening remarks (only Durango's are included), as those remarks were exactly the same at each hearing. Those portions of the letters and the transcripts that have not been reprinted are available for public review in BLM's San Juan Resource Area Office in Durango, Colorado.

For ease of reference, the written comments and hearings have been listed on the following pages according to source. The index number refers to the number in the upper right-hand corner of each comment. Written comments have been assigned a numeral and each of the hearings was assigned letters of the alphabet.

PUBLIC COMMENTS

List of Contributors

Individual, Group, or Agency	Index Number
Air Force, Dallas, TX-	1
Penny Caldwell, San Juan Basin Archaeological Society, Durango, CO-	2
John W. Sanders, Durango, CO	3, DU
James Suckla, Cortez, CO-	4
Colorado Native Plant Society, Ft. Collins, CO	5, DE
Elliott Bernshaw, Salt Lake City, UT-	6
Lucy Berardi, Los Altos, CA-	7
Thomas Merlan, New Mexico State Historic Preservation Officer, Santa Fe, NM-	8
Chief, Mineral Analysis Division, Office of Surface Mining, Denver, CO	9
Richard Casey, Colorado State University, Ft. Collins, CO-	10
Velma and Edward Osterfeld, Dolores, CO-	11
San Miguel County Commissioners, Telluride, CO	12, N
Harry Melts, Porthill, ID	13
New Mexico State Clearinghouse, Santa Fe, NM	14
William Hobbs, Durango, CO	15
Caroline Clark, Durango, CO-	16
Dorothy Newell, Durango, CO-	17
Lorraine Lane, Denver, CO	18
Charles Butler, Durango, CO-	19, DU
Lynn Cudlip, St. Paul, MN	20
Thomas Nelson, American Mining Congress, Washington, D.C.-	21
Rev. Forrest Whitman, Boulder, CO-	22
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State Historic Preservation Officer, Colorado Historical Society, Denver, CO	25
John W. Spezia, Steamboat, CO	26
Stu Bengson, United 4-WD Associations, Tucson, AZ	27
Shirley Shepherd, Castle Rock, CO-	28
Stanley Dempsey, Colorado Mining Association, Denver, CO	29
Nina Johnson, Boulder, CO	30
Adeline Becay, Durango, CO	31
George Carlson, Shell Western E&P, Inc., Houston, TX	32
Charles Wallace, Durango, CO	33
John Ritchey, Ft. Lewis College, Durango, CO	34
James Devine, U.S. Geological Survey, Reston, VA-	35
Patrick Tierney, Adrift Adventures, Ft. Collins, CO-	36
Susan Graves, CU Wilderness Study Group, Boulder, CO	37, DE
Glenn Parton, Durango, CO	38, DU
John Domingue, Englewood, CO	39
E. Fred Birdsall, Conoco, Inc., Denver, CO-	40
John Koella, Boulder, CO-	41
Kenton L. Burns, Denver, CO-	42

Individual, Group, or Agency	Index Number
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Mark Meeks, Denver, CO	44
Vernon Valantine, Colorado River Board of California, Los Angeles, CA	45
Dana Ivers, Bayfield, CO	46
Charles Shepard, Mancos, CO	47
J. P. and Maxine Johnson, Cahone, CO	48
Helen Suckla, Cortez, CO	49
Mark Pearson, Colorado Open Space Council, Denver, CO	50, N
Michael Kellett, Ann Arbor, MI	51
Robert E. Schreiner, Jr., Englewood, CO	52
Richard Hughes, Chevron, Denver, CO	53
James Suckla, Cortez, CO	54
Kathleene Parker, Denver, CO	55
Frank Clark, Farmington, NM	56
Richard Warnick, Box 754, Moab, UT	58
Jerry Kempf, Colorado-Ute Electric Association, Montrose, CO	59
Henry Wright, Durango, CO	60, DU
Daniel Poole, Wildlife Management Institute, Washington, D.C.	61
Truman Young, Denver, CO	62
C. Kenneth Pearse, Durango, CO	63
F. B. Davey, Durango, CO	64
Carl Weston, San Juan Chapter, National Audubon Society, Durango, CO	65
Carl Weston, Durango, CO	66, DU
Donald Blasko, Bureau of Mines, Denver, CO	67
Myrna Steinkamp, Ft. Collins, CO	68
Montezuma County Commissioners, Cortez, CO	69
Kirk Koepsel, Conifer, CO	70
Susan Martin, Ft. Collins, CO	71
George Grover, Superintendent, BIA, Southern Ute Agency, Ignacio, CO	72
Merry Havens, Indian Peaks Group of the Sierra Club, Boulder, CO	73, DE
Scott Hetzler, Cortez, CO	74
Margaret Langworthy, League of Women Voters, Durango, CO	75
Mark Bagley, Ridgecrest, CA	76
Lawrence Phelps, Gunnison, CO	77
Norm Mullen, Boulder, CO	78
U.S. Fish and Wildlife Service, Golden, CO	79
Jim Fulton, Cortez, CO	80
Michael Scott, Regional Director, Wilderness Society, SW Region, Denver, CO	81
Paul Petersen, Grand Junction, CO	82
Reece Malles, Cortez, CO	83
Jack W. Scott, Hesperus, CO	84
Board of Directors, SW Colorado Livestock Association, Cortez, CO	85
Dr. Gary Ruggera, La Plata County Open Space Committee, Durango, CO	86
Mary S. Caton, Denver, CO	87
Chris Seitz, Salina, KS	88
Louise Stiver, Cortez, CO	89

Individual, Group, or Agency	Index Number
William E. Bray, Redvale, CO	90, N
John H. Miller, Co[illegible] CO	91
John R. Swanson, Berkeley, CA	92
Albert Spencer, Durango, CO	93
Jerry Dickenson, Durango, CO	94
Steve Davis, Mancos, CO	95, C
Richard Dudley, Mancos, CO	96, C
Jean McCulloch, Durango, CO	97
John Sisk, Juneau, AK	98
Tim Wilson, Lewis, CO	99
Brad Klafehn, Montrose, CO	100
John R. Kirkpatrick, Supervisor, San Juan National Forest, Durango, CO	101
Cecil Gustin, Dolores, CO	102, C
John Himebaugh, Phillips Petroleum Co., Denver, CO	103
C. M. Moseley, Atlantic Richfield Co., Denver, CO	104
Roberta Andersen, Amoco Prod. Co., Denver, CO	105
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Rick Gold, USDOI, BOR, Durango Projects Office, Durango, CO	108
Mr. and Mrs. Arthur Wilson, Yellow Jacket, CO	109
Jeanne Hemphill, Grand Junction, CO	110
Patricia Flint, Dolores, CO	111
Stephen Tuber, U.S. Environmental Protection Agency, Region VIII, Denver, CO	112
Mrs. Kenneth Pearse, Durango, CO	113
Robert Benton, USDOI, Fish & Wildlife Service, Endangered Species Office, Salt Lake City, UT	114
David Getches, Dept. of Natural Resources, State of Colorado, Denver, CO	116
C. L. Wilmott, Exxon Co., Denver, CO	117
Alice Frell, Rocky Mountain Oil and Gas Association, Inc., Denver, CO	118
Barry Welch, USDOI, Bureau of Indian Affairs, Albuquerque, NM	119
Teresa Seamster, Boulder, CO	120
Rick Morrell, Durango, CO	121
Richard Vollmer, Director, Natural Resources Council, Washington, D.C.	122
Charles H. Brownman, Western Nuclear, Lakewood, CO	123
Martha Nesbitt, Boulder, CO	124

B. RESPONSES TO COMMENTS

The numbered responses below correspond to the numbers and letters in the margins of the comment letters and hearing transcripts in the following section. Following the response number is a list (shown in parentheses) of the letter number and public hearings where the comments were raised. If a change to the text of the Final RMP/EIS has been made, it is indicated in the response. If not, the response is an attempt to clarify a portion of the text or to explain why a particular issue has or has not been addressed. The responses have been grouped together by issue topic.

General

Response No. 1 (Source: 7). BLM policy states that where a single landowner's private land completely surrounds a BLM tract identified for exchange or sale, he/she would be offered the chance to acquire the BLM land at fair market value.

Response No. 2 (Sources: 25-1 and 36-2). See Appendix Five, pages 5-37 through 5-39 for management guidelines for ACECs (Emphasis Area L).

Response No. 3 (Sources: 25-2 and N-8). Narrative has been changed (see FEIS, p. 2-48). As the CRMPs are developed (an administrative function of BLM), when needed, the State Historic Preservation Officer (SHPO) will be provided copies for informational purposes.

Response No. 4 (Source: 25-3). The nomination of individual sites or districts to the National Register will be given the highest priority possible given manpower and budget constraints. Also see Appendix Four (Table 4-2).

Response No. 5 (Source: 38). After NPS personnel complete the Hovenweep National Monument Master Plan, the BLM will consider any potential changes in the RMP. A proposal such as this would require Congressional action and funding prior to BLM participation.

Response No. 6 (Source: 43). The BLM is committed to a program of volunteerism and realizes its value. In this case, we have decided to remove both wild horse herds. See FEIS, page 1-41 for BLM's proposed wild horse plan.

Response No. 7 (Source: 50-2). The BLM has not given greater weight to the counties' comments than to the State of Colorado's comments. If this were the case, we would not be recommending the Dolores River Canyon WSA as suitable for wilderness designation (Montrose County has spoken against that designation). We have contacted all of the counties in the planning area and several have bone on record as being against wilderness designation. BLM is considering the counties' viewpoints, along with those of the Colorado Department of Natural Resources, in making our recommendations.

Response No. 8 (Source: 50-6). An alternative to consider salinity control structures outside the WSA (as proposed in the comment) would not further benefit the present analysis. Because the area will not be recommended suitable for wilderness

designation, it will be managed to protect the fragile soils, vegetation and water resources. We are proposing intensive watershed, range and wildlife management to improve the conditions within the total area.

BLM does not view the proposed management as a "major conflict" and, therefore, is not "trading" wilderness management for watershed management. BLM does not feel that wilderness management is appropriate for the McKenna Peak WSA and is proposing multiple use management, with emphasis on watershed and erosion control.

Response No. 9 (Source: 50-10). The Proposed Plan contains that analysis (see Chapter Three, Cultural Resources).

Response No. 10 (Sources: 50-20 and 107-4). The two tracts will be subjected to the environmental analysis process described in Chapter One (p. 1-13 and 1-14). If the review determines that these tracts should be retained in public ownership, they will not be disposed of. Sufficient detail concerning the tracts is not currently available to make a decision concerning disposal. Disposal methods and priorities will be determined later, but current BLM policy gives priority to other agencies.

Land acquisition was not a major issue in this plan and, therefore, only a few parcels were identified. The multiple use emphasis descriptions all provide for the acquisition or exchange of parcels to enhance multiple use management. Acquiring those sites mentioned would also enhance public values. If, through exchanges or purchase, these lands could be acquired in the future, BLM would probably be interested. Acquiring specific tracts implies planning on private land, which is beyond the scope of this RMP.

Response No. 11 (Source: 50-22). Text changes have been made.

Response No. 12 (Source: 50-23). We assume you are referring to the Lower Paradox Valley and there is no special management guidance for it--it would have a 'G' for General Multiple Use Management.

Response No. 13 (Source: 60-2). See page 4-1 of the Final RMP/EIS for a discussion of possible expansion of the Hovenweep National Monument.

Response No. 14 (Source: 65-8). Timber and woodland management is a minor BLM program in this planning area and was not a major issue raised in the RMP process. The timber and woodland production capability classification standards are contained in BLM manuals and instruction memoranda. These standards are available for review in the Montrose District Office and Colorado State Office in Denver. The timber and woodland inventory data are available in the Montrose District Office and BLM staff would be happy to discuss the data with any members of the public.

Response No. 15 (Source: 72-2). The letter that was sent in December 1983 asks for "any specific land use plans, policies, etc., that exist for your reservation that concern adjacent public land. If any exist, then please furnish us with a copy so we may use it in our plan."

Response No. 16 (Source: 79-1). As described in Chapter One of the FEIS, wildlife values will be closely reviewed prior to disposal to determine if significant habitat exists. If a determination that valuable wildlife habitat would be lost, BLM probably

will make the land available for disposal to a wildlife agency or may not dispose of the land. Each disposal action will require an environmental review with the necessary interagency coordination that occurs, depending on the relative significance of the action.

Response No. 17 (Source: 82-3). See FEIS, page 3-21 for additional detail.

Response No. 18 (Source: 86). The lands you identified were apparently incorrectly described as Township 36 North (San Juan National Forest) and we assume should be Township 35 N. The Emphasis Area will be changed from disposal to wildlife (Area "B").

Response No. 19 (Source: 100-2). BLM does not feel that acquiring the private land west of the Tabeguache Creek WSA would add greatly to the area's management. Public access is available from several different roads which pass near the area. A scenic easement could be pursued in the future if public use warranted spending funds, given the existing access.

Response No. 20 (Source: 106-1). The FEIS (p. 2-4) describes the PSD Class I areas within and near the planning area. All other portions of the planning area are designated PSD Class II.

Response No. 21 (Source: 106-2). Energy development will be subject to site-specific environmental assessments on a project-by-project basis. Coal leasing will be analyzed in a separate environmental document at a later date. Pending specific project data, assessing air quality impacts would be impossible.

Response No. 22 (Source: 106-3). BLM, which had a visual resource inventory of the entire planning area conducted in 1979, found Weber and Menefee mountains to be of B and C quality (only A quality scenery is depicted on Fig. 2-9). BLM recognizes that the two mountains have important scenic values. In the Proposed Plan, we will manage them for Visual Resource Management Class II standards (see Appendices Two in the Draft RMP and Five in the Final RMP). The DEIS used the existing inventory data. Site-specific projects that may be proposed in the future near Mesa Verde National Park will be assessed environmentally for their visual impacts (see DEIS, Chapter One, p. 1-15).

Response No. 23 (Sources: 70-2 and 106-6). BLM has met several times with staff members from Mesa Verde National Park and Hovenweep National Monument. At no time have specific proposals been made to change management of the public lands near these monuments. BLM does provide for a no-surface occupancy oil and gas leasing stipulation for approximately one-fourth mile around national monuments in Colorado, which has been in effect for several years and will be continued (see Appendix Four in the Final RMP). The National Park Service will complete a master plan on the monument sometime in the future. BLM has not seen the plan and has no idea what specific proposals the monument personnel may have concerning surrounding public land. If specific actions are recommended in the officially approved master plan for the monument, BLM could then undertake a plan amendment and consider those changes in the future. Pending an approved plan and a specific proposal, this RMP will be used.

Response No. 24 (Source: 106-7). This RMP/EIS has been coordinated on numerous occasions with the BLM staff in Monticello, Utah. A Memorandum of Understanding exists between the two offices and is on file in BLM's San Juan Resource Area Office in Durango, Colorado, concerning the land use plan and the WSAs in Utah.

Response No. 25 (Source: 106-8). Adding several BLM employees, for whatever reasons, would cause insignificant economic impacts within the planning area.

Response No. 26 (Sources: 106-9 and 116-12). The 'Les' was an error in the map legend and does not refer to the ACEC. The ACEC was not indicated on the Preferred Alternative Map due to a scheduling problem; however, it will be on the Final Proposed Plan Map.

Response No. 27 (Source: 106-10). Text has been changed (see FEIS, Chapter Two, Recreation).

Response No. 28 (Source: 106-11). Text has been changed (see FEIS, Chapter Two, Paleontology).

Response No. 29 (Source: 108-2). Text has been changed (see Appendix Five, Lands).

Response No. 30 (Source: 112-1). Specific achievable objectives related to each land use program will be developed in the site-specific activity plans to be implemented over the term of this plan, which does not analyze site-specific proposals and their resultant impacts. That analysis will be accomplished through additional assessments associated with the activity plans. The opportunity for public and agency involvement is a constant and ongoing process in BLM's operation.

Response No. 31 (Source: 112-7). Erosion inventories for the remaining 63 percent of the planning area will be completed as manpower and funds are available. The RMP could target a date for completing the inventory, but it is difficult to schedule future budget allocations.

Response No. 32 (Source: 112-6). Potential for impacts to the 1,400 archaeologic and historic sites mentioned will vary significantly depending on the type of proposed treatment. Many of these sites will be of only minor significance; the other more significant sites will generally be avoided. Impacts still can occur due to trampling and increased access; however, inventories conducted prior to treatments and cultural resource monitoring during the treatments should reduce impacts.

Response No. 33 (Source: 112-8). The level of data you request is not a requirement of RMP level planning. When site-specific activity plans are developed, the data you have indicated is necessary for planning will be gathered and used to develop site-specific action plans. In many cases, adequate data to set priorities for specific actions and sources are not currently available to BLM. Any improvement of water quality in the upper Animas River drainage would generally benefit all resources.

Response No. 34 (Source: 112-9). Adequate inventory data do not exist to project salinity reductions between alternatives. Data need to be gathered and activity plans developed and implemented before accurate projections can be made concerning non-point source salinity control.

Response No. 35 (Source: 112-10). Text has been changed (see FEIS).

Response No. 36 (Source: 112-11). Site-specific inventories will be conducted as manpower and funds are available to develop activity plans.

Response No. 37 (Source: 112-12). The BLM has listed in priority order its aquatic resource management program to those streams or rivers having the greatest potential for improvements. Site-specific, interagency management plans will be developed outlining specific management actions and inventories needed to correct resource problems, which does not mean that the other streams or rivers in the planning area will be ignored. When opportunities for actions arise, the BLM will take actions to correct problems and improve aquatic/riparian habitat. See Chapter Three (FEIS) for discussion of the impacts of intensive livestock and wildlife management.

Response No. 38 (Source: 112-13). The criteria requested are developed during the site-specific action plans and are not needed for this RMP.

Response No. 39 (Source: 112-14). The minimum flows needed to protect beneficial uses of the streams are also of concern to BLM. This is an ongoing program within BLM but not an "issue" in developing this RMP and was, therefore, not discussed.

Response No. 40 (Source: 112-15). The ACEC was not included on the Preferred Alternative Map due to printing conflicts. Figure 1-1 was developed to show the proposed area; the ACEC will be shown in the Final Proposed Plan Map. The ACEC could be applied to the Resource Conservation Alternative; however, the BLM chose not to do so to provide a broader range of alternatives.

Response No. 41 (Sources: 112-18 and DU-1). As discussed in Appendix Seven in the Draft RMP, the BLM is going to develop specific monitoring plans for the various resource programs. The plans for wildlife and range are very detailed, taking into consideration many of the items mentioned in your comment and are already being developed and will be available in the San Juan Resource Area Office. The RMP does not need to contain all these types of data if they are readily available. We encourage the public and other agencies to come to BLM and learn what we are doing and comment on positive improvements to our monitoring program.

Monitoring plans for water quality and salinity reductions will be developed in conjunction with developing activity plans, required because of the site-specific nature of each watershed improvement project. Basic data collection is an ongoing process.

Response No. 42 (Source: 116-6). See FEIS (Chapter Two).

Response No. 43 (Source: C-1). The BLM's Proposed Plan is to specifically close the Cross, Cahone, and Squaw/Papoose canyons to vehicle access, subject to valid existing rights.

Response No. 44 (Source: N-1). The resources are listed according to the BLM manual or handbooks concerning environmental documents.

Response No. 45 (Source: N-7). Many parcels of public land in the planning area have erosion problems associated with them. The intent of the RMP was to identify those areas where erosion problems were most significant and also management had the greatest potential to achieve positive results. The area mentioned by the commentator was not one of those priority areas. The BLM would be glad to work with individuals on specific problems, subject to available manpower and funds.

Minerals

Response No. 46 (Source: 16-2). There is a great demand for certain mineral commodities, i.e., oil, within the United States. BLM's mineral policy is to "actively encourage and facilitate the development by private industry of public land mineral resources in a manner that satisfies national and local needs and provides for economically and environmentally sound exploration, extraction, and reclamation practices."

Response No. 47 (Source: 17-2). The majority of the Cross, Cahone, and Squaw-Papoose canyon WSAs are leased for oil and gas. The purpose of this RMP is to make future leasing decisions.

Response No. 48 (Source: 19-2). BLM's assessment of the mineral potential is on page 2-20 of the Draft Wilderness Technical Supplement. Impacts to the mineral resources are summarized in Table 1-11 of the FEIS.

Response No. 49 (Source: 20-4). Under the concept of valid existing rights, pre-FLPMA oil and gas leaseholders can explore and develop the oil and gas resources under BLM's Interim Management Policy. The last column heading means "approximate percent of WSA covered by pre-FLPMA oil and gas leases" (see Table 2-2, Draft Wilderness Technical Supplement).

Response No. 50 (Sources: 50-4, DE-4, and DE-12). See Appendix Four of the FEIS for a discussion of the lease tracts plus maps.

Response No. 51 (Sources: 50-7 and DE-13). BLM doesn't feel that the exchange of pre-FLPMA oil and gas leases is an alternative within the scope of an RMP. In this particular case, it also lacks merit. Insufficient data exist to determine the quantity or value of the oil and gas in these leases, which are necessary to facilitate an exchange. Even if this data were available, similarly unleased, high potential oil and gas lands generally are not available.

Response No. 52 (Source: 50-9). BLM's own mineral assessments were done on a more site-specific basis than USGS's Circular 902-A-P (1983). BLM feels its assessments of mineral potential are valid.

Response No. 53 (Source: 50-11). BLM policy for conducting validity investigations fall under four criteria (Washington Office IM-83-311): (1) Patent application; (2) conflict with a disposal application and public interest consideration; (3) conflict with a Federally funded project; or (4) flagrant, unauthorized use. Validity investigations presently would not be a reasonable investment of funds nor would they be in the public interest.

Response No. 54 (Sources: 50-17, 72-1, and 119). At this stage, BLM is identifying lands for further consideration for possible future coal leasing. Site-specific reviews of these areas will occur and consider factors such as those mentioned in the comment prior to any future decisions to lease coal (see p. 1-9 through 1-12 of FEIS).

Response No. 55 (Source: 53). The referenced Washington Office Information Bulletin postdates the DEIS; however, to the greatest extent possible, the guidelines of the system for fluid mineral leasing will be incorporated into the FEIS.

Response No. 56 (Source: 59-2). There is more acreage being considered for coal leasing in the Nucla area than is shown on the Preferred Alternative Map, an error that will be corrected in the Final Plan. All public land and minerals in the KRCRA have been considered in the land use plan.

Response No. 57 (Sources: 67-1 and 112-16). See text changes in the FEIS (p. 2-10 through 2-12, and 3-54 through 3-56).

Response No. 58 (Source: 67-2). Chapter Two of the FEIS addresses the affected environment. Mentioning the mineral commodities acknowledges their known or potential occurrences. Figures 2-1a and 2-1b indicate the mineral areas of higher value (i.e., KGSs, KRCRAs, etc.) and were not meant to display mineral occurrence throughout the planning area.

Response No. 59 (Source: 67-3). This is stated in the FEIS (p. 2-12) under Other Minerals, first paragraph, last sentence.

Response No. 60 (Source: 67-4). Aside from the situation with oil and gas leasing in Menefee and Weber mountains, these areas are not identified as areas in which possible coal leasing is recommended during the 10-year period of the plan. The coal reserves would not be "lost"--they would be available for future leasing, subject to a plan amendment.

Response No. 61 (Source: 67-5). Uranium and vanadium resources would not be adversely affected, because development and production could take place through a Plan of Operations under the 43 CFR 3809 regulations.

Response No. 62 (Source: 67-6). Adverse impacts from the no-surface occupancy stipulation would be the additional cost of directional drilling, as discussed in the FEIS (p. 3-54). Current technology would limit the development of oil and gas resources in areas wider than one mile where no-surface occupancy provisions would be used.

Response No. 63 (Source: 67-7). The loss of 4.2 billion cubic feet of gas in the Dolores River Canyon WSA was added to the minerals discussion in the Summary in Chapter One (FEIS). Under the Proposed Plan, coal in Menefee and Weber mountain areas would not be lost, but these areas are not within the 46,000 acres identified for possible coal leasing in the second round sale for the San Juan Coal Region.

Response No. 64 (Source: 67-8). See Appendix Five, page 5-12, of the FEIS for a description of minerals management in the Dolores River Canyon and Silverton SRMAs.

Response No. 65 (Source: 73-1). The RMP will only identify areas for further consideration for coal leasing. Should an expression of interest for leasing be received, site-specific impacts will be addressed during the activity planning stage.

Response No. 66 (Source: 79-2). Special stipulations pertaining to fish and wildlife resources may be added to the lease form. These stipulations are developed on site-specific bases during the activity planning stages of the coal leasing process.

Response No. 67 (Sources: 84-1 and 84-8). Table 1-2-A has been changed in the FEIS. Forty-six thousand acres available for exploration and development in the Proposed Plan should not be confused with suitable acres (see Table 1-2-A).

Response No. 68 (Source: 84-2). Surface owner preference letters were sent only to surface owners whose land is underlain by surface mineable coal (as required by BLM regulations). Only 4 percent of the coal in the Durango KRCRA is recoverable by surface mining methods. The remaining surface landowners were not contacted concerning subsurface coal mining.

Response No. 69 (Source: 84-3). This information has been mapped and is available in BLM's Durango Office, the San Juan Resource Area. Some of the surface mineable coal is included in the 46,000 acres (mainly in the Chimney Rock area).

Response No. 70 (Sources: 84-4, 84-8, and 120). Forty-six thousand acres is the area identified for possible future coal leasing; this is no indication that this acreage will ever actually be leased and does not directly reflect the expressions of industry received in 1983.

Response No. 71 (Source: 84-5). Figures are included in the RMP; maps showing the areas are available in BLM's Durango Office (San Juan Resource Area). Surface owners were contacted where surface mineable coal is present.

Response No. 72 (Source: 84-6). No attempt has been made to assess these specific impacts due to the absence of specific data concerning coal mine locations, size, transportation and mining techniques. These concerns will be addressed in site-specific environmental documents prior to leasing.

Response No. 73 (Source: 84-7). The Appendix Table of Contents should read 4-B-1 instead of 4-B-8. Stipulations are derived from pre-lease, site-specific environmental assessments. Adequate environmental stipulations would require the site-specific data to be meaningful in protecting all resources.

Response No. 74 (Source: 100-3). Options may exist for a company or individual to donate a lease for a tax deduction; however, BLM has had no experience with an action such as this and it would have to be totally voluntary on the lessee's part. In addition, this would not comply with BLM's mineral policy (see DEIS, p. 1-9).

Response No. 75 (Source: 104-1). As shown in Appendix Five, minerals are a multiple use program described in each multiple use emphasis area within the planning area and are not limited to Minerals Emphasis Area "E."

Response No. 76 (Sources: 104-2 and 105). The no-leasing category has been removed in the FEIS and will now be leased with a no-surface occupancy stipulation.

Response No. 77 (Source: 106-5). BLM has consulted with the U.S. Fish and Wildlife Service and CDOW concerning such operations and their possible effects on wildlife. The BLM-proposed plan reflects those consultations.

Response No. 78 (Sources: 116-14 and N-9). Appropriate protection and management of paleontological resources will vary widely depending on the proposal to be undertaken in a given area. Appendix Five (p. 5-19) provides direction to protect the area. This will occur through site-specific environmental analysis completed on each action.

Response No. 79 (Source: 118). The FEIS is being revised to comply with the Robert G. Lynn case (76 IBLA 384, October 27, 1983).

Response No. 80 (Sources: DE-2, DE-10, 73-2, and 82-2). The range of alternatives for oil and gas leasing accurately reflects BLM policy (DEIS, p. 1-9) and resource conditions found in the planning area.

Response No. 81 (Source: DE-14). Where data were sufficient, estimates of oil and gas reserves within the WSA boundaries were given in the DEIS and the Draft Wilderness Technical Supplement.

Response No. 82 (Source: DE-15). See the Draft Wilderness Technical Supplement, Table 1-1.

Vegetation

Response No. 83 (Sources: 5-1, 23, 68, 71-1, 74, 76, 116-13, and DE-1). The Research Natural Area (RNA) designation for the protection of sensitive plants and the occurrence of a specific plant association does not appear to be necessary. The plant resources are within the proposed Dolores River Canyon Wilderness Area, whose management will provide adequate plant protection. When a specific management plan is written for the wilderness area, these specific vegetation resources would be addressed. Currently, neither our data nor that of the Colorado Natural Heritage Inventory has documented any current or realistic potential threat to the area's integrity.

The Spring Creek ACEC nomination could be counterproductive. BLM regulations and the Endangered Species Act are adequate to protect this area from degradation without designation. We have no data to indicate that the Spring Creek site is in danger from any BLM-permitted activities. The notoriety associated with ACEC designation may result in private and commercial collection activities. Collection is presently not a problem because the site is not well known.

The designation of an ACEC for Lupinus crossus and Psorolea aromatica may be premature. Our inventory work indicates that the occurrence of these two species within Paradox Valley is more extensive than previously thought. Additional populations of Lupinus crossus have also been located in another section of the planning area. As with the other sites, our inventory work and that of the Colorado Natural Heritage Inventory have not identified any significant existing or potential threats to these populations. In addition to continuing inventories for these species, regular surveillance flights are conducted over Paradox Valley to help prevent unauthorized surface disturbance. BLM feels strongly that the plants should be protected and feels that current administrative protection is adequate to protect the plants.

Be aware that managing ACEC and RNA areas is still subject to substantial management discretion and very little additional protection. For these particular sites, we cannot identify any clear resource management advantage to be gained by designation. In the future, if the situation at any of these sites changes and designation appears advantageous, it will be pursued.

Response No. 84 (Source: 79-4). Under the Resource Conservation Alternative, management emphasis seeks to enhance or protect native rangeland ecology. Mechanical rangeland treatments or vegetative type conversions to produce forage can significantly alter ecological balance. Treatments that resulted in changes away from ecological balance (as defined by SCS range site descriptions) would be considered to have adverse impacts. Properly designed grazing or other natural treatments may result in improvements in ecological balance as well as increased forage production.

Response No. 85 (Source: 93-1). Executive Order 11988 states that:

> (d). When property in floodplains is proposed for lease, easement, right-of-way, or disposal to non-Federal public or private parties, the Federal agency shall (1) reference in the conveyance those uses that are restricted under Federal, State, or local floodplain regulations; and (2) attach other appropriate restrictions to the use of properties by the grantee or purchaser and any successors, except where prohibited by law; or (3) withhold such properties from conveyance.

Response No. 86 (Source: 93-2). We have no conclusive data to indicate that herptile populations near the McElmo RNA are in any way jeopardized by habitat modification. Our information indicates that the herptiles occur in the RNA and in the surrounding public lands; since the populations inside the area are not isolated, they should be sustainable. We do not presently have sufficient justification to warrant enlarging this area.

Response No. 87 (Source: 112-2). The stated range conditions reflect changes in the native ecology. Nearly all the lands have been altered to some degree by cumulative impacts of past activities. Because of the harsh ecological and climatic conditions, natural regeneration and recovery are expected to take many years. For example, pinyon-juniper woodlands might take 300 years to reach "excellent" ecological condition (equivalent to a natural climax plant community). Differences in recovery rates are accounted for by differences in investments in additional forage production (land treatments), differing levels of intensive management, and differing management emphases with regard to maintaining or improving native rangeland ecology.

Wildlife

Response No. 88 (Source: 10-2). Maintaining undisturbed tracts of diverse habitats for scientific value was not a planning issue and, therefore, was not considered in the RMP.

Response No. 89 (Sources: 14-1 and 65-2). A new table, which lists plants and animals that have potential for occurrence of threatened and endangered or candidate species within each of the eight WSAs, will be added to the final wilderness document. The Draft Wilderness Technical Supplement did not list these species. Only species listed by the USFWS are addressed, because they are legislatively mandated. By policy, BLM also attempts to protect and manage an additional ten species that are of concern to the State of Colorado. Known winter habitat for bald eagles occurs in the McKenna Peak and the Dolores River Canyon WSAs. Known hunting habitat for peregrine falcons occurs within the Weber and Menefee mountain WSAs. The Dolores River Canyon WSA also has known populations of the USFWS's candidate species Erigeron kachinensis, as well as populations of plant species that are of concern to the State of Colorado.

Response No. 90 (Source: 65-3). Executive orders 11990 and 11988 concerning aquatic and riparian habitat provide BLM with authority and direction to protect riparian areas from various forms of activity that might degrade the resources. BLM is instituting monitoring studies on those identified problem areas. Most riparian areas with problems thought to be related to grazing activities are within intensive ("I") management category allotments. As AMPs are developed, these problems will be addressed.

Wildlife program funds for vegetation treatments to enhance forage production would generally be used only in wildlife emphasis areas (designated "B" on alternative maps). Specific management guidance for these areas under the Proposed Plan (see Appendix Five, p. 5-7) would limit livestock use where needed to provide sufficient forage for big game species and would limit total use on forage species to protect highly preferred species of forage plants.

Response No. 91 (Source: 77-2). The best information available indicates that within the areas with potential big game-livestock forage conflicts, in the past five years, elk populations have increased by 8 percent and deer populations have increased by less than 3 percent. While elk use patterns in the area have definitely shifted, we have no data to indicate that wildlife use on BLM lands has increased overall beyond the 8 percent elk population increases.

After joint consultation with grazing permittees and Colorado DOW (CDOW) personnel, after all agreed to estimates of elk numbers, calculated forage demand by elk in all cases was within estimated carrying capacity. However, when considered with livestock use, total use apparently exceeds estimated capacity. Deer numbers were derived from CDOW sampling data. In several areas, estimates of deer forage demand exceed estimates of capacity. Monitoring studies are being initiated in all areas of potential livestock-big game conflicts to determine the amounts and types of reductions that may have to be made. Where monitoring data indicates reductions are needed, the domestic livestock and wildlife will probably share that reduction, depending on data results gathered.

Response No. 92 (Source: 79-3). Protecting peregrine falcon habitat does not vary at all by alternative. The DEIS (p. 3-5, paragraph 3) refers to coal development potential foregone within the Durango KRCRA. The text has been changed in the FEIS to reflect the revised unsuitability assessment.

Response No. 93 (Source: 116-1). Given limitations on document length, detailed analysis was necessarily limited. However, cumulative impacts of private land development, along with loss of wildlife habitat due to projected developments on BLM land, were discussed in Chapter Three. CDOW is routinely consulted on wildlife-related plans and is a major cooperator on projects developed to benefit wildlife.

Response No. 94 (Source: 116-2). CDOW will be consulted during site-specific analysis to evaluate wildlife impacts from proposed land disposal actions. An environmental assessment would be prepared for each disposal action.

Response No. 95 (Sources: 51-3 and 116-3). Managing the McElmo RNA will be addressed in a site-specific activity plan to be developed as soon as funding is provided, after the FEIS is approved. The mineral withdrawal is proposed to be lifted due to lack of locatable mineral potential. No-surface occupancy stipulations for oil and gas operations would be maintained. The present range of alternatives is adequate for the RNA.

Response No. 96 (Source: 116-5). If the Dolores River Canyon WSA is not designated wilderness by Congress, protective RNA status for the rare plant habitat in Coyote Wash could then be considered and established as a normal function of BLM management and planning system maintenance.

Response No. 97 (Source: 116-7). See changes in Chapter One (Table 1-4). Based on consultation with the CDOW regional biologist and District wildlife managers, those dates would be most appropriate considering local habitat and climatic conditions.

Response No. 98 (Source: 116-8). Merriam's turkey, along with many other native wildlife species, were not listed because they currently inhabit public lands in the planning area. Page 5-5 of the DEIS states that BLM will cooperate with CDOW in reintroducing species.

Response No. 99 (Source: 116-9). Table 2-13 reflects stream survey data completed by BLM in 1984. The upper reaches of Tabeguache Creek generally maintain a year-round water flow.

Response No. 100 (Source: 116:10). The statement that impacts would be similar means "of a similar nature." Those differences in results that could be estimated or measured have been enumerated in Chapter Three.

Response No. 101 (Source: C-2). BLM has knowledge of the peregrine falcons associated with the Mesa Verde National Park area. Protective oil and gas stipulations have been previously used to protect the adjacent public land. The greatest protection is the steep topography surrounding the site.

Range

Response No. 102 (Sources: 4-1, 20-5, 65-5, 69, 77-1, 80, and 83-1). Present estimated capacity in livestock AUMs displayed in Appendix Table 9-E is based on data obtained from the vegetation inventory (see Appendix Nine-G). Appendix Table 9-I-1 shows the procedure for arriving at AUM numbers displayed in Appendix Table 9-E and is used as baseline data for alternative analysis. (See the Final RMP for these appendices' changes.) It is BLM policy to adjust livestock use levels by methods described on pages 1-15 through 1-17 of the FEIS.

Response No. 103 (Sources: 37-3, 50-13, 52-2, 82-2, 107-3, DE-9, and N-5). Three of the four alternatives examined result in improved range condition over the long term (see figs. 3-1 through 3-4). The range of alternatives reflects viable options consistent with BLM policy and also is within NEPA requirements.

During the life of the land use plan (10 years) or over the long term (20 years), it is not technically feasible or economical to expect improved range condition on every acre. Major reasons for this include one or more of the following: (1) under present climatic conditions, vegetation change may require periods exceeding 40 years; (2) vegetation change may require manipulation or treatment that may not be economical or feasible and; (3) some areas may have lost their natural potential to improve because of soil loss or competition from undesirable plant species, unless new technology is developed. For example, a site with shallow soils producing a dense stand of cheatgrass under low rainfall may not produce forage associated with good ecological condition in the next 40 plus years. Such sites are also very risky candidates for mechanical treatments such as seeding.

Response No. 104 (Sources: 4-2, 49-1, and 85). The BLM relies on the technical expertise and professional judgment of its employees in formulating resource management

guidance. The inventory team was trained and supervised by professional range conservationists whose participation in the program ensured quality data.

Response No. 105 (Source: 49-2). Current BLM policy related to developing grazing EISs and RMPs is intended to satisfy our court-ordered obligations, which require a detailed level of data and site-specificity for each allotment necessary to make grazing-related planning decisions and impact analysis.

Response No. 106 (Sources: 50-14 and N-6). See text changes in the FEIS (under the No Grazing Subalternative).

Response No. 107 (Source: 50-15). Of approximately 14,400 acres of new vegetation treatments, 3,050 acres of new treatments would be in the pinyon-juniper vegetation type (see Appendix Table 9-F in the Draft RMP and FEIS, p. 3-60 and 3-61). Approximately 23,800 acres (see Appendix Table 9-F in the Draft RMP) would be maintained during the planning period. Approximately one-third to one-half of this acreage is in the pinyon-juniper type.

Response No. 108 (Source: 50-16). See Monitoring Livestock Use Adjustments (Chapter One, p. 1-16 through 1-17) for narrative concerning carrying capacities and future development concerning the Rangeland Program Summary.

Response No. 109 (Source: 54-2). Due to time constraints, access problems and rough terrain, some allotments, including South Mountain No. 7043, were inventoried by crews ferried by helicopter.

Response No. 110 (Source: 55-2). The Proposed Plan includes considerable action to improve vegetation conditions and increase forage production on the public lands. Table 1-5 shows estimated improvement costs necessary to implement grazing management on allotments within the planning area. Grazing systems outlined in Appendix Nine-C-1 (see the Draft RMP) will be developed through activity planning. Livestock adjustments will occur through monitoring efforts (p. 1-16) and season-of-use based upon critical periods (see Appendix Nine-I-1 in the Final RMP) will be established. Separately or in combination, these efforts are necessary to properly manage the vegetation resource.

Response No. 111 (Source: 61-1). Appendix Table 9-E (see the Final RMP) shows estimated capabilities by allotment by alternative. Page 9-E-7 in the Final RMP summarizes and shows comparisons in change from current active preference and three-year average actual use.

Response No. 112 (Source: 61-2). This was merely a determination that the current three-year use (actual or licensed) is as indicative of the livestock operation trends in each allotment as a five- or even ten-year period would be.

Response No. 113 (Source: 61-3). This information is presented on p. 2-14 through 2-17 of the FEIS.

Response No. 114 (Source: 61-4). As indicated on page 1-17, locations of various grazing systems and range improvements will be developed through the AMP process rather than through this RMP. See Chapter One and Appendix Seven (in the Draft RMP) for monitoring descriptions. BLM regularly coordinates its monitoring and other multiple use programs with CDOW.

Response No. 115 (Source: 61-5). Under the Resource Utilization Alternative, livestock use is projected to increase by +29 percent (from current active preference) and by +44 percent (from 3-year actual use) as shown on page 9-E-7 (see the Final RMP). Page 9-E-1 explains our assumptions in gaining additional livestock AUMs. Chapter One (Tables 1-5 and 1-6) show additional improvements relative to other alternatives. By increasing forage, these improvements would result in both livestock and big game increase; however, our proposed decision is to maintain, not increase, big game numbers.

Response No. 116 (Source: 61-6). Information in Chapter Three (Table 3-2, Table 3-4, the narrative on p. 3-49, and Table 3-8) were used to develop Appendix Table 9-E (see the Final RMP), which is a summary of all alternatives and compares the three-year average use with total use proposed for each alternative.

Response No. 117 (Source: 65-4). BLM is recommending intensive management to improve livestock management and vegetative conditions (see Summary, Proposed Plan).

Response No. 118 (Source: 65-6). For categorical procedures, see FEIS, page 1-16. Categories are subject to change when acquired data indicate a need.

Response No. 119 (Source: 65-7). Transfers of grazing preference are governed by current regulations.

Response No. 120 (Source 77-3). For assumptions used in developing Appendix Table 9-E, see page 9-E-1 of the Final RMP.

Response No. 121 (Source: 77-4). The 33% adjustment shown in the Summary and in Table 9-E was derived from the vegetation inventory methods described in Appendix Nine-G of the Final RMP. See also Response No. 101.

Response No. 122 (Source: 77-5). It is not our intent to eliminate or drastically reduce spring use. However, this use will be regulated as shown in Appendix Nine-I (Range Assumptions).

Response No. 123 (Source: 83-2). As both grazing and recreation are recognized components of the BLM's multiple use management system, a balance between the two is strived for.

Response No. 124 (Sources: 88-1 and 106-4). The public lands adjacent to Mesa Verde National Park have been available for livestock grazing for many years. BLM is not proposing to increase the use but to maintain present use levels (see Appendix Nine-E in the Final RMP). We have no knowledge of past use problems requiring the need for additional fencing, but, if needed in the future, joint discussion with NPS personnel would be undertaken. Parts of the boundary are currently fenced, with topography greatly limiting use in many other areas.

Response No. 126 (Source: 112-3). See range improvements, page 1-17 for priority ranking.

Response No. 127 (Source: 112-4). See Table 9-D-2 in the Draft RMP and see Chapter One, Management Guidance Common to All Alternatives (DEIS, p. 1-15 through 1-17).

Response No. 128 (Source: 112-5). See range improvements, page 1-17 and assumptions, Appendix Nine-I (in the Final RMP). See Appendix tables 9-D-2 and 9-D-3 in the Draft RMP and Emphasis Area A, livestock management, p. 1-20. Additional analysis is contained in the various resource components throughout Chapter Three.

Recreation

Response No. 129 (Sources: 12, 20-2, and 54-1). Decisions regarding site-specific actions adjacent to the Dolores River are not being formulated as part of this planning process. Planning for construction sites and facilities on the Dolores River is currently being analyzed as part of the Dolores Project-McPhee Dam development complex. The Definite Plan Report and Environmental Impact Statement for the Dolores Project calls for development of whitewater boating access sites on the Dolores River below McPhee Dam. This development action is separate from the San Juan-San Miguel plan (see FEIS, p. 2-36 through 2-40). Additionally, more site-specific planning on Dolores River recreation sites with public input will follow the completion of the RMP.

However, site-specific management actions on the Dolores River will be guided by direction determined in the plan and by commitments previously made as part of the Dolores-McPhee Project. For example, future site development between Gypsum Valley and Bedrock will obviously be influenced by potential wilderness designation of the Dolores River Canyon WSA or by the availability of boatable water released from McPhee Dam.

BLM's primary recreation management goal is to ensure the continued availability of outdoor recreation opportunities that the public seeks and that are not readily available from other public or private entities. Intensive development may be provided in areas where recreation opportunities not available from other public or private entities would be denied to the public, or where there is significant need for BLM management due to resource damage, visitor health and safety problems, and resource user conflicts involving recreation.

Response No. 130 (Source: 13-2). Approximately 90 percent of the planning area is designated "open" to motorized vehicle use, which means there are no restrictions on ORV enthusiasts in "open" areas.

Response No. 131 (Source: 13-3). There are no provisions made in the plan for "play ORV areas" because the issue was never raised during the planning process.

Response No. 132 (Source: 35). Refer to Response No. 128. Site-specific actions, such as development of drinking water and sanitary facilities, will be addressed in more detailed planning documents, beyond the scope of this plan.

Response No. 133 (Sources: 37-4, 41, 50-19, 51-2, 71-3, 73-2, 88-1, DE-8, and N-4). BLM's ORV regulations require all public lands to be designated as "open," "limited," or "closed." The objectives of these regulations are (1) to protect the resources of the public lands; (2) to promote the safety of all users of those lands; and (3) to minimize conflicts among various uses of those lands.

Without identified conflicts or problems, there is no need to arbitrarily restrict motorized activity. The range of restrictions exhibited in the alternatives adequately reflects documented conflicts or violations of the BLM's ORV management objectives and mitigates any such identified problem situations.

Response No. 134 (Source: 50-18). The Resource Conservation Alternative contains a proposal for a mineral withdrawal on the Dolores SRMA as was presented in September 1983 (see Appendix Five, Emphasis Area C, Minerals).

Response No. 135 (Source: 50-21). The recreation program is the lead program in BLM for RNAs.

Response No. 136 (Source: 116-11). The ONA is 3,100 acres. The 560 acres was proposed for a mineral withdrawal.

Wilderness

Response No. 137 (Source: 1). BLM will address issues, such as low level military flights, in the Wilderness Management Plan following an area's designation as wilderness by Congress.

Response No. 138 (Sources: 2, 3, 5-2, 6, 13-1, 15, 16-1, 17-1, 18-1, 20-3, 22, 24-2, 26, 28, 30, 31, 33, 34, 37-1, 39, 40-1, 42, 44, 47, 50-5, 51-1, 52-1, 55-1, 58-2, 59-1, 60-1, 62-2, 65-1, 70-1, 71-2, 73-3, 75, 78, 81, 82-1, 87, 88-2, 89, 90, 91, 92-1, 94-2, 95, 96, 97, 98, 100-1, 104-3, 107-1, 110, 112-17, 116-4, 117, 121, 124, DU-2, DE-3, DE-5, DE-6, DE-11, and N-2).

The Dolores River Canyon WSA (the Wilderness Manageability Alternative listed in the Draft Wilderness Technical Supplement, p. 1-9) is being recommended as preliminarily suitable for wilderness designation, primarily because it possesses highly outstanding characteristics for primitive and unconfined recreation, solitude, and naturalness, as well as scenic grandeur and superb wilderness characteristics. It is a nationally unique area and is worthy of preservation in its natural state. In addition, the Bureau of Reclamation's salinity control project proposal (see FEIS, Chapter Two, for additional description) could be accommodated within the proposed suitable area (see BOR Letter 108 and Response No. 151).

(1) Formerly a Wild and Scenic River candidate as recommended by an interagency study report in 1976 and recommended to Congress for protection on several occasions;
(2) Outstanding primitive and unconfined recreation opportunities associated with the river, canyons, and mesas;
(3) Unique plant and animal communities found within the WSA that contain threatened and endangered species habitat; and
(4) Extremely diverse topography and geology that lends to the creation of outstanding scenery, vistas and excellent solitude opportunities.

This unique combination of factors, found only in the Dolores River Canyon WSA, creates the specific need and rationale for BLM to recommend this area as preliminarily suitable for wilderness designation.

A total of 28,539 acres would be recommended--the acreage and boundaries listed in the Wilderness Manageability Alternative and Preferred Alternative in the Draft Wilderness Technical Supplement (April 1984). A wilderness management plan will be developed following the area's designation by Congress.

Nonsuitable--Specific Rationale--Cross, Cahone, and Squaw/Papoose Canyon WSAs. These WSAs would be recommended as nonsuitable for wilderness designation based on the following reasons:

(1) All three WSAs have manageability problems because of numerous pre-FLPMA oil and gas leases, encumbering an average of approximately 42 percent of the public land within these WSAs (see maps and narrative in Appendix Four); they also contain numerous unpatented mining claims. There is a moderate to high probability that some of the pre-FLPMA leases or mining claims will be developed during the term of the plan.

(2) They do not contain nationally significant values (scenery, T&E habitat, and recreation) unique enough for wilderness designation. Although their cultural resources are unique, these cultural values, along with the other primary values identified (roadless, wildlife, etc.), will be properly managed in consonance with other resources including livestock grazing, aquatic/riparian habitat, and minerals.

Nonsuitable--Specific Rationale--Weber and Menefee mountains, McKenna Peak, and Tabeguache Creek WSAs. These WSAs would be recommended as nonsuitable for wilderness designation based on the following reasons:

(1) The values contained in each area (i.e., scenery, wildlife habitat, etc.) are not nationally significant enough for inclusion in the NWPS. While they may be locally or, in some cases, regionally important, to be suitable for recommendation, BLM feels that these areas should contain a substantial amount of nationally significant values to be recommended for inclusion in the NWPS.

(2) The management proposed by BLM is the most appropriate use of the land and would protect the sensitive resources found in each area.

(3) The majority of the primary values identified (roadless, visual, wildlife habitat, etc.) by the public can be managed in a nonwilderness alternative management scheme through professional application of the principles of multiple use management.

(4) Weber Mountain WSA has four pre-FLPMA oil and gas leases (see Appendix Four, Table 4-3) with known oil and gas production. A KGS is located at its northern boundary, which raises concerns as to its future management. Developing these leases (which has a low to moderate probability to occur) would severely affect the values contained in the area.

(5) Tabeguache Creek WSA is a sensitive area ecologically and archaeologically. Protecting the wildlife and archaeological values can be accomplished by designating the canyon as an Outstanding Natural Area (ONA). Recreation use may be incompatible with this proposed management direction. Visitor use of the area may be limited only to educational and scientific purposes; a management plan would be written after the area is designated an ONA and would consider those uses. The integrity of the main canyon will also be protected by an ORV closure and no-surface occupancy stipulations for oil and gas leasing.

(6) These four WSAs would not significantly expand wilderness opportunities within a day's driving time of major population centers, because there are significant designated wilderness areas in the immediate region (see Appendix Three-A of the Draft Wilderness Technical Supplement).

These seven areas met the basic definition of WSAs and were therefore identified as WSAs; however, they do not contain nationally significant values to the same degree, extent, or combination of those found in the Dolores River Canyon WSA or other areas previously recommended suitable within BLM's Montrose District.

Therefore, it is BLM's recommendation that these seven WSAs do not warrant inclusion into the NWPS; they would be managed under BLM's Interim Management Policy for WSAs until the wilderness review process is completed.

Response No. 139 (Sources: 10-1, 18-2, 20-1, 36-1, 37-2, 50-8, 62-1, 75, 88-2, 94-1, 107-2, DE-7, and N-3). During the BLM's wilderness inventory process, the upper three miles of Coyote Wash and Nyswonger Mesa were eliminated from further wilderness resource consideration due to the presence of maintained roads and seismic bulldozing scars. There is no new information that indicates that the inclusion of these areas would add to the manageability or improve the wilderness resource values of those lands within the portion of the Dolores River Canyon WSA recommended suitable for wilderness designation. During the wilderness inventory process, no formal appeals were made to the Interior Board of Land Appeals (IBLA) concerning these lands.

For more information on Tabeguache Creek, McKenna Peak, Weber and Menefee mountains, and Cahone, Cross, and Squaw/Papoose canyon WSAs, see Response No. 141.

Response No. 140 (Source: 14-2). There are other WSAs in the Montrose District which were not included in the San Juan-San Miguel RMP/EIS. These WSAs have been, or will be, studied through other land use plans. Draft recommendations are planned to be completed by 1986.

Two wilderness EISs have been completed within the Montrose District. The Powderhorn Instant Study Area FEIS was completed in 1984, resulting in 43,311 acres being recommended to Congress as suitable for wilderness designation. This area is currently being considered for designation by Congress. The Gunnison Basin/American Flats-Silverton DEIS was completed in 1982; the Preferred Alternative of this DEIS recommended as suitable:

WSA	Inventory Number	Acreage
Red Cloud Peak	(CO-030-208)	11,140
Handies Peak	(CO-030-241)	7,120
American Flats	(CO-030-217)	1,505
Weminuche Contiguous	(CO-030-238B)	375
Whitehead Gulch	(CO-030-230B)	4,115
Needle Creek	(CO-030-229B)	4,100

Two WSAs are contiguous to WSAs currently being studied in the Grand Junction Resource Management Plan, scheduled to be issued as a Draft RMP/EIS in the spring of 1985. Three WSAs remain to be studied: Gunnison Gorge (CO-030-353), 19,500 acres; Adobe Badlands (CO-030-370B), 10,560 acres; and Camel Back (CO-030-353), 10,900 acres. These three WSAs (totaling approximately 41,000 acres) will be studied as part of the Uncompahgre Basin RMP/EIS scheduled for completion in September of 1986.

Response No. 141 (Sources: 19-1, 29, and 45). The boundary of the Dolores River Canyon WSA is correctly portrayed as shown on the map on page 1-10 of the Draft Wilderness Technical Supplement; the map on page 2-22 is not the official BLM map of the WSA boundary and will be corrected in the Final Wilderness EIS. Therefore, no addition was made to the WSA boundary. The original topographic map of the WSA boundary is in the Permanent Documentation File in BLM's Montrose District Office, 2465 South Townsend, Montrose, Colorado.

This WSA boundary does not "cut off the land owner's access to his own lands in Section 31." The present way is impassable to four-wheeled vehicles but is open to foot and horse access. In a meeting between the landowner and BLM in June 1984, the landowner stated that he did not require motorized vehicle access to his land in Section 31 and that he preferred to use the way as a stock driveway for his cattle. For more discussion about the Bureau of Reclamation's letter, see Response No. 152.

Response No. 142 (Source: 21). This information is contained in Appendix Three-A and on pages 2-1 and 2-2 of the Draft Wilderness Technical Supplement.

Response No. 143 (Source: 24-1). While wilderness resource management may be restrictive to some of the multiple use programs, the Federal Land Policy and Management Act of 1976 recognized wilderness as a component of multiple use management on the public lands.

Response No. 144 (Source: 36-1). Following designation of the Dolores River Canyon WSA as wilderness by Congress, BLM will prepare a wilderness management plan, which will address commercial outfitters and the need, if any, to allocate use by river runners, both private and commercial.

Response No. 145 (Source: 40-2). The term "vehicle way" is defined specifically in the BLM's Wilderness Inventory Handbook, derived from Congressional hearings held in conjunction with the formulation of the Federal Land Policy and Management Act (FLPMA) of October 21, 1976. A vehicle way and roadless are defined as:

> The word 'roadless' refers to the absence of roads which have been improved and maintained by mechanical means to insure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road.

Response No. 146 (Source: 50-3). The WSAs do qualify for consideration; however, BLM does not feel that they have the degree of outstanding qualities to actually qualify to be recommended to Congress as preliminarily suitable for inclusion in the NWPS.

Response No. 147 (Sources: 50-1 and 60-3). As described on page 3-1 of the Draft Wilderness Technical Supplement, diversity in the NWPS is but one of several factors considered by BLM (see Table 3-A). BLM has complied with the appropriate regulations; it does not count "votes" but provides opportunities for all of the public to participate in the process before making decisions or recommendations.

Response No. 148 (Sources: 50-8 and 50-12). See Responses No. 141 and 142. In addition, the areas on Skein Mesa and Davis Mesa were not included in the WSA because of past road development and uranium and oil and gas exploration. No formal appeals were received during the wilderness inventory process on any of these lands adjacent to the then-proposed WSA boundary.

The road constructed between Cross and Cahone canyon WSAs was built for Pioneer-Uravan by Daniel Dalrymple, not Phillips Uranium. Phillips Uranium's exploration activity was conducted in a nonimpairing manner. The road built for Pioneer-Uravan was not discovered for several months after it was constructed. Other mining activity (pre-FLPMA uranium mining) had occurred below this road construction; thus, the area was eliminated from further wilderness resource consideration. This area between Cross and Cahone canyon WSAs was not formally appealed during the wilderness inventory process.

Resource No. 149 (Source: 58-1). Deletions in the land proposed suitable for wilderness designation (Proposed Plan) for the Dolores River Canyon WSA were not based on mining claims. The 913 acres deleted were to increase the manageability of the proposed wilderness area by reducing potential conflicts with private land (patented mining claims) and ORV use. See also Response No. 141.

Response No. 150 (Source: 84-9). Should Menefee Mountain WSA be designated by Congress as wilderness, BLM would attempt to acquire the private inholding if the landowner were willing to exchange or sell his/her land.

Response No. 151 (Source: 92-2). As a result of a Congressionally approved boundary adjustment, the West Needles Contiguous, Needle Creek, Whitehead Gulch, and Weminuche Contiguous WSAs are now under the San Juan National Forest's administration (see Appendix One in the Draft RMP) and have been recommended as preliminarily suitable for wilderness designation.

Response No. 152 (Source: 108-1). The WSA boundary cannot be redrawn by BLM to omit the eastern 1/4 of Section 31 (160 acres). Only Congress can make the decision as to which lands are officially released from further wilderness consideration once they have been designated a WSA (stated in Section 603 of FLPMA, October 21, 1976). However, the Bureau of Reclamation can work directly with BLM through the normal ROW process. The BLM's Interim Management Policy and Guidelines for Lands Under Wilderness Review (IMP) dated July 12, 1983, states:

> New rights-of-way may be approved for temporary or permanent uses that do not satisfy the nonimpairment criteria only under the following conditions: . . . (c) In cases of non-Federal land where the BLM has determined that application to the nonimpairment standard would unreasonably interfere with the enjoyment of the landowner's rights . . . (pg. 20; 3. Right-of-Way Corridors).

Omitting 160 acres of the WSA would take Congressional action, which would not meet the present time frame of 1987 (as proposed by the Bureau of Reclamation). Issuing a ROW, as described in the IMP, would meet the deadline and is found to have less impact in the long term (after completing the EA) on wilderness and other resource values.

The official topographic map in BLM's Permanent Documentation File was shown to the Bureau of Reclamation staff in Montrose, Colorado, in June 1984. It was explained to their staff that the map on page 1-10 of the Draft Wilderness Technical Supplement correctly portrays the boundary of the Dolores River Canyon WSA. See also Response No. 149.

Response No. 153 (Source: 122-1). The commentator has confused the BLM's "Interim Management Policy" (IMP) for wilderness study areas (WSAs) and the development of this RMP for this area. The IMP will be in effect pending Congressional action on the WSAs. The RMP will provide the long-term guidance concerning future management after Congressional action on the WSAs. The table on page 1-36 (DEIS) was not meant to be a priority listing of land uses proposed for the areas; it merely describes the proposed multiple use emphases to be used for future management. The commentator is encouraged to read the multiple use description for cultural resources found (p. 5-21 through 5-24) in Appendix Five of the DEIS to see that restrictions on minerals are very specific to given areas and, generally speaking, would not greatly limit or restrict the mineral development in the areas. In addition, the Draft RMP did not mention locatable minerals on pages 3-54 through 3-56, because the BLM-proposed plan for the area should not have significant impacts on the locatable mineral industry.

DEPARTMENT OF THE AIR FORCE
AIR FORCE REGIONAL CIVIL ENGINEER CENTR : REGION (AFESC)
1114 COMMERCE STREET
DALLAS, TEXAS 75242

1

REPLY TO ATTN OF: ROV

SUBJECT: San Juan/San Miguel, Draft Resource Management Statement

TO: Area Manager - San Juan Resource Area
U.S. Department of the Interior
Bureau of Land Management
Federal Building, Room 102
701 Camino del Rio
Durango, CO 81301

RECEIVED BLM MAY 2 1 1984 Durango, Colorado

Thank you for allowing us the opportunity to review the San Juan/San Miguel Draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS).

1 (137)

The Air Force interest in these matters is to retain use of existing and the establishment of future military air training routes which traverse wilderness areas. Currently there are no low level training routes traversing the study area.

This situation, however, can change at anytime depending on military airspace requirements. These requirements are based on mission requirements, fuel costs and environmental constraints which subject these flights to frequent change. As a rule, the Air Force relegates low level high speed flights to the least accessible and sparsely inhabited areas because of general aviation needs and populated areas. We ask that you give consideration in your management planning efforts to these Air Force needs to avoid any conflict with future use of low altitude airspace by the Air Force.

The Air Force position on these flights is based on the high training and readiness values rendered by use of these low altitude flights. Restrictions on military overflights are opposed by the Air Force.

We hope this information is helpful in your planning efforts. If additional information is needed, please contact Mr. Tony Robledo, at 214-767-2514, or FTS 729-2514.

PAUL D. GARCIA, Lt Col, USAF
Chief, Environmental Planning Division

1 Atch
Draft RMP

Cy to: USAF/LEEV
AFREP/Northwest Mtn Rgn

SAN JUAN BASIN ARCHAEOLOGICAL SOCIETY

Chapter of Colorado Archaeological Society

Tel. 303-884-2486 Tel. 303-259-0841

2

22 May 1984

Dave Miller, Area Manager
San Juan Resource Area
Bureau of Land Management
Rm. 102
701 Camino del Rio
Durango, CO 81301

RECEIVED BLM MAY 23 1984 Durango, Colorado

Dear Mr. Miller:

2 (138)

The San Juan Basin Archaeological Society wishes to express their support for granting wilderness status to the eight wilderness study areas in the Bureau of Land Management's San Juan Planning Unit. Members of our group have visited and hiked over several of these areas in recent months, and are particularly impressed by the scenic beauty of the Dolores River Canyon, the rich cultural resources of the Cross Canyon and Cahone Canyon areas, and the primitiveness and ecological diversity of the Weber Mountain and Menefee Mountain areas. These fragile ecosystems are of too great value to our people, and to our children and their children, to justify a return to multiple-use management.

We would appreciate your recommendation of wilderness designation - the "All Wilderness Alternative" - for Cahone Canyon, Cross Canyon, Menefee Mountain and Weber Mountain; we suggest the "Wilderness Manageability Alternative" for the Dolores Canyon; and we support either the "Wilderness Alternative" or the "Wilderness Manageability Alternative" for the remaining three study areas. We feel all eight areas should remain roadless and free of lumbering, mining or drilling activity.

SAN JUAN BASIN ARCHAEOLOGICAL SOCIETY

Chapter of Colorado Archaeological Society

Tel. 303-884-2486 Tel. 303-259-0841

Sincerely yours,

Penny Caldwell

Penny Caldwell, President
San Juan Basin Archaeological Society
1 West 28th Street Way
Durango, CO 81301

cc: Gov. Lamm
Rep. Kogovsek
Sen. Hart
Sen. Armstrong

3

Geological Consultant — Well Log Analyst

JOHN W. SANDERS
345 HIGHLAND MILL DRIVE, DURANGO, CO 81301
TEL. 303-259-0841

May 22, 1984

Dave Miller
Area Manager
San Juan Resource Area BLM
701 Camino del Rio
Durango, CO 81301

Dear Mr. Miller:

Thank you for sending me a copy of the Draft Resource Management Plan and Environmental Impact Statement for the San Juan - San Miguel planning area.

3 (138)

I am particularly interested in the BLM plans for the eight wilderness study areas in our state. I have visited most of the study areas and feel that all eight are worthy of further protection because of their unusual scenic characteristics, outstanding ecological features, and abundance of cultural resources. Especially impressive are the fantastic groups of Anasazi ruins in the Cross Canyon and Cahone Canyon areas and the magnificent canyon vistas of the Dolores area.

I would like to see the BLM adopt the All-Wilderness Alternative for Cahone and Cross Canyons and for Menefee and Weber Mountains, and either the All-Wilderness or the Wilderness Manageability Alternatives for the other four areas.

Yours truly,

John W. Sanders
John W. Sanders

Copies: Governor Lamm
Senators Hart, Armstrong
Representative Kogovsek

RECEIVED
Bureau of Land Management
MAY 30 1984
Durango, Colorado

4

May 26, 1984

Mr Dave Miller
Bureau of Land Management
701 Camino Del Rio
Durango Co 81301

Dear Dave,

After looking over the E.I.S. concerning Disappointment I am protesting several catagories.

4-1 (102)
#1 - The amount of A.U.M's the study team came up with. 1
#2 - The number of B.L.M. usuable acres
#3 - The 15136 acres that was unclassified.
#4 - The condition of the range.

4-2 (104)
These are all contradicting to the 1967-68 study that was done by Jenson of the B.L.M.

It looks like the solution for these problems is to go over the allotment with knowledgable people that are familiar with Semi-desert range land.

Sincerely

James Luckel
12551 Hwy 666
Cortez, Co. 81321

AREA MANAGER
Asst. Area Mgr.
I. & M. Chief
Range Staff
Multi-Res. Staff
RECEIVED BLM
MAY 30 1984
Durango, Colorado
Planning
Dolores/AMD
Admin.

5

COLORADO NATIVE PLANT SOCIETY

P.O. BOX 200 • FORT COLLINS, COLORADO 80522

...dedicated to the appreciation and conservation of the Colorado native flora

June 11, 1984

RECEIVED
Bureau of Land Management
JUL 27 1984
Durango, Colorado

Mr. David J. Miller, Area Manager
Bureau of Land Management
San Juan Resource Area
Room 102, Federal Building
701 Camino del Rio
Durango, CO 81301

Dear Mr. Miller:

On reviewing the San Juan/San Miguel Draft Resource Management Plan, the Colorado Native Plant Society was surprised to find that three important plant sites were not included and considered as potential Areas of Critical Environmental Concern (ACEC). We were under the mistaken impression that these three areas had been nominated for ACEC status by the Colorado Natural Areas Program. We therefore wish to make these nominations:

5-1 (83)

Site	Recommended classification
Coyote Wash	Research Natural Area
East Paradox Creek	ACEC
Spring Creek	ACEC

We will not repeat the specific description and justification for Special Management Area designation for each site, knowing that you already possess this information as a result of previous discussions with the Colorado Natural Areas Program. We ask that you make the Determination for all three sites as potential ACECs/RNAs at your earliest convenience, prior to the final RMP.

CONPS realizes that the Coyote Wash site is contained within the area that would be designated (under the Draft RMP's Preferred Alternative) as the Dolores River Canyon Wilderness Area. We have reviewed the proposed management guidelines for this Wilderness Area, and we conclude that most features of the proposed management for the Wilderness Area also would be appropriate for the Research Natural Area. The exceptions to this would be for Livestock Management and Wild Horses. Livestock grazing should be formally excluded from the RNA, as this is incompatible with maintaining the natural values of the site. This should pose no conflict with current use, or use that would occur under Wilderness management, as the proposed RNA portion of the site is largely inaccessible to livestock. Wild Horses, however, have the potential of significantly degrading the natural values of the site, and should be excluded from the RNA by fencing or other means.

The Draft RMP clearly indicates your awareness of the rare and sensitive plants within the San Juan/San Miguel Area; we commend your recognition of these plants, and we are confident you will agree that the appropriate Special Management designation for sites for these extremely important botanical resources will further enhance the potential effectiveness of the San Juan/San Miguel RMP.

5-2 (138)
In addition to the need for plant protection through designation of the three areas mentioned above, the Colorado Native Plant Society supports the designation of all eight Wilderness Areas (as under the Resource Conservation Alternative), and even greater limitation to ORV use than that proposed in the Preferred Alternative. These measures, we believe, would inevitably have long-term positive effects on the natural vegetation of the Area.

With the exception of the preceding points, CONPS favors the Resource Conservation Alternative, but finds the Preferred Alternative a generally acceptable resolution of the competing demands on the San Juan and San Miguel area. We compliment the preparers on their adroit balancing of alternative demands.

Thank you for the opportunity to comment on the Draft RMP. We hope our constructive comments will be useful in achieving an even better Final RMP.

Please include these comments in the Final RMP.

Sincerely yours,

Susan S. Martin

Susan S. Martin, Ph.D.
President

6

RECEIVED
Bureau of Land Management
JUN 20 1984
Durango, Colorado

Bernshaw Photography
Box 6235
Salt Lake City, Utah
84106-0235
June 15, 1984

E.I.S. Team
San Juan Resource Area
Durango, Colorado

Dear Sirs:

I am compelled to comment on your Draft San Juan/San Miguel Resource Management Plan E.I.S. recently released.

6 (138)
WILDERNESS-- You don't seem to be recommending very much--in fact, very little at all. Only if there are other competeting resources of immense value or critical national shortage should you recommend against wilderness-designation for any of your WSA's. Roadless and natural land is vanishing in the lower-48 States. Let's try a bit harder to preserve what little is left. Your preliminary recommendation of only one WSA of 28,000 acres out of eight WSA's is UNACCEPTABLE. Simply unacceptable. You have 96% of your area available for oil & gas leasing, 79% totally open to ORV, 97% open to mineral entry and planned rangeland "improvements" for just about everywhere. In view that all the other resources have so much, don't you think you could recommend just a bit more for wilderness? Couldn't coal and oil & gas surrender, for example, at least the Weber Mt. WSA (6,000 acres) which adjoins wilderness in Mesa Verde Nat'l Park????? Greed and selfishness-- industry already has 90% of your area, and they want 95% and you're going to give it to them. The BLM wilderness review is a joke.

GRAZING-- Grazing on the public lands is marginal and of minor importance to the nation's economy. Don't plan for long-term increases, instead I would recommend phasing cows totally out! Then you would automatically get vegetation improvements, wildlife increases, riparian & watershed protection and higher water quality. I would be ready to argue that long-term benefits from wilderness and wildlife (hiking and hunting, etc.) could be more valuable than private livestock on our public lands. Far more cows are grown in the East and on private land. Let wildlife have our public land. Your a.u.m.(cows vs. wildlife) allocations on our public lands are disgusting, your grazing fees vs. private-land fees are disgusting, and your totally cost-ineffective range "improvement" programs (especially exotic grass reseedings) are disgusting. Stop it!

Yours outraged,
Elliott Bernshaw
Elliott Bernshaw
A tax-paying citizen

P.S.: ~~copy~~ original to BLM State Director.

RECEIVED
Bureau of Land Management

JUN 20 1984

Durango, Colorado

7

160 South Springer Road
Los Altos, California 94022
June 18, 1984

San Juan Resource Area

U.S. BUREAU OF LAND MANAGEMENT
Federal Building, Room 102
701 Camino del Rio
Durango, Colorado 81301

RE: Public Hearings

In regard to your draft San Juan/San Miguel Resource Management Plan/ Environmental Impact Statement recently received, you propose disposition of selected isolated public lands.

7(1) My understanding is that under current regulations, when such lands become designated for public sale, that adjacent property owners have priority in their purchase. Is that true?

Such a priority appears not to be stipulated in your present proposal, or if it is so stipulated I could not pinpoint it. In as much as one of our eighty-acre, isolated parcels lies between and adjacent to my properties in Township 42, Range 19, Section 9, San Miguel County, Colorado, I have interest in acquiring it if and when it becomes available.

Since I have my range lands in that section fenced so that grazing is controlled and since I have maintained weed-control spraying for noxious thistle, I have been protective of the adjacent public land, too. For such reasons, if no other, I believe a priority should be included in your disposition of public lands under the Resource Management Plan.

My son, Richard Eric Hauser, residing on the above properties and managing them for me, is hereby authorized to be my spokesperson at any of your public hearings.

Sincerely,

Lucy K. Berardi

Lucy K. Berardi

RECEIVED
Bureau of Land Management

JUN 20 1984

Durango, Colorado

STATE OF NEW MEXICO
OFFICE OF CULTURAL AFFAIRS
HISTORIC PRESERVATION DIVISION

VILLA RIVERA, ROOM 101
228 EAST PALACE AVENUE
SANTA FE, NEW MEXICO 87503
(505) 827-8320

TONEY ANAYA
GOVERNOR

THOMAS W. MERLAN
DIRECTOR

JILL Z. COOPER
CULTURAL AFFAIRS OFFICER

8

June 18, 1984

Mr. Kenneth D. Herman, Area Manager
Bureau of Land Management
San Juan Resource Area
Room 102, Federal Building
701 Camino del Rio
Durango, CO 81301

Dear Mr. Herman:

Thank you for the opportunity to comment on the Draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for the San Juan-San Miguel planning area, dated April 15, 1984.

The lands described in the above document are located primarily in Colorado, with only a small portion of lands in Rio Arriba County, New Mexico, included within the planning area. The draft EIS provides a generally good overview of cultural resource concerns, the types of impacts which may be anticipated from various types of development, and measures which may ameliorate adverse effects. The document indicates that resource development actions will be reviewed individually, in accordance with the National Historic Preservation Act and implementing regulations.

The major concern of this office is that any actions taking place within New Mexico be coordinated appropriately with this office and with the pertinent area office of the BLM.

I appreciate your continuing cooperation.

Sincerely,

Thomas W. Merlan
State Historic Preservation Officer

TWM/NEW/bc

9

RECEIVED
Bureau of Land Management

JUN 20 1984

Durango, Colorado

United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202

MEMORANDUM

TO: Area Manager, San Juan Resource Area, Bureau of Land Management

FROM: William J. Kovair, Acting
Chief, Mining Analysis Division, Western Technical Center, Office of Surface Mining Reclamation and Enforcement (OSM)

SUBJECT: Review and Comments on the San Juan-San Miguel Planning Area Draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS)

OSM's Western Technical Center has reviewed the draft RMP and EIS and has no comments at the present time. In the future, should coal exploration occur and/or permit applications to mine be submitted following leasing, OSM would be involved in the mine permitting process under provisions of the Surface Mining Control and Reclamation Act of 1977.

When the final RMP and EIS become available, we would appreciate copies.

Thank you for the opportunity to comment. If you have any further questions, please direct them to Charles M. Albrecht, Chief, Environmental Analysis Branch, Western Technical Center, telephone number (303) 844-5656 or FTS 564-5656.

10

CSU

Department of Zoology and Entomology

Colorado State University
Fort Collins, Colorado
80523

6-20-84

Area Manager
San Juan Resource Area, BLM
701 Camino del Rio
Durango, CO
81301

To Whom It May Concern,

Please include this letter in the public record.

I would like to express my opinions on the recently released BLM wilderness recommendations for 8 wilderness study areas in the San Juan/ San Miguel Resource Management Plan. Having spent a considerable amount of time in the areas covered by the RMP, I feel I must comment on the recommendations.

10-1 (139)

Dolores River Canyon

I am pleased that the BLM has recommended some 28,000 acres for wilderness. However, they should also include the upper 3 miles of Coyote Wash and Nyswonger Mesa.

Tageguache Creek

I am dismayed that none of this area was recommended for wilderness. This drainage provides a unique continuum from semi-arid desert to subalpine forest. A transect of this type through several different ecological biotomes should be preserved.

McKenna Peak

I cannot believe that this area was not recommended for wilderness designation. It provides another unique ecological transition from saltbush-greasewood to Douglas fir. It also contains a wildhorse herd, numerous fossil beds, and provides winter wildlife range. From a scientific as well as aesthetic viewpoint it should be preserved.

Weber Mt. and Menefee Mt.

Why is neither one of these areas recommended as wilderness? The BLM proposes no mineral leasing here, no ORV use, and emphasizes wildlife protection and semiprimitive recreation. This strikes me as almost "ex post facto" wilderness management!

Cross, Cahone, and Squaw/Papoose Canyons

All these areas should be recommended for wilderness designation.

RECEIVED
Bureau of Land Management

JUN 22 1984

Durango, Colorado

-2-

Some of these areas contain as many as 100 archeological sites per square mile. In no other area of the National Wilderness Preservation System is the Great Basin sagebrush ecosystem as well represented. As a population biologist I consider such broad expanses of undisturbed habitat crucial for future scientific studies.

10-2 (88) As a biologist I am alarmed at the ever increasing rate of habitat destruction in the United States and especially in Colorado. The scientific value of large, undisturbed tracts of diverse habitats must be considered in the RMP's. Caution is the better part of wisdom. We must plan now to protect the habitat and ecosystems we have remaining.

Sincerely,

Richard Casey

Richard Casey, MS

11

RECEIVED
Bureau of Land Management

JUN 25 1984

Durango, Colorado

Dolores Colorado
June 20, 1984

Dear Mr. Miller:

I am writing you in regards to the BLM San Juan Resource Management Plan. My husband and myself are rock hounds and hikers. In the cooler months we make numerous trips to BLM areas nearby rock hunting and just hiking. We would like to see the older existing roads remain open giving us access to areas we could not reach otherwise.

We hope our hobbies are also considered when reaching a decision on the use of the area.

We plan to be at the County meeting June 26, 1984.

Thank you.

Sincerely,

Velma Osterfeld
Edward Osterfeld

16274 CR 23
Dolores Colo, 81323

12

Board of Commissioners
County of San Miguel

DISTRICT NO. 1
THOMAS H. HALE
Telluride, Colorado

DISTRICT NO. 2
FRED H. ELLERD
Placerville, Colorado

DISTRICT NO. 3
RAYMOND SNYDER
Norwood, Colorado

Post Office Box 548
TELLURIDE, COLORADO 81435
Phone (303) 728-3632

GAY M. CAPPIS
County Clerk

JOHN HORN
County Attorney

BRAUNA PALMER
Administrative Secretary

June 22, 1984

RECEIVED
Bureau of Land Management

JUN 25 1984

Durango, Colorado

David J. Miller, Area Manager
San Juan Resource Area
Bureau of Land Management
Federal Building
701 Camino del Rio
Durango, CO 81301

Re: San Juan-San Miguel Draft Resource Management Plan/Environmental Impact Statement (RMP/EIS)

Dear Mr. Miller:

In 1979, the Bureau of Land Management (BLM) and the San Miguel County Board of Commissioners signed a Memorandum of Understanding (MOU) concerning cooperation and coordination with San Miguel County's land use plans & regulations.

12 (129) We have two principal concerns with proposals within the RMP/EIS which may conflict with the spirit of this MOU (copy attached).

1. Slick Rock
San Miguel County has approved a Planned Unit Development at Slick Rock which provides for commercial facilities including a restaurant, Sheriff's Office, mobile home park, and camping & parking facilities. We believe that this private enterprise will be more than adequate to meet the needs of the community and tourists. And it would be unlikely that any additional permits would be given out for similar facilities for this area.

2. Gypsum Valley
The remoteness of Gypsum Valley at its connection with the Dolores River would make the provision of law enforcement services very difficult and costly. At this time, it appears unlikely that a Special Use Permit would be granted for camping, commercial or recreational services at this location.

The Board would be more than glad to meet with representatives of the BLM at a mutually agreeable time to discuss these proposals.

Sincerely,

SAN MIGUEL COUNTY BOARD OF COMMISSIONERS

By Fred H. Ellerd
Fred H. Ellerd, Chairman

TH/sp
pc: County Planner Tom Smith
County Sheriff Bill Masters
att

RECEIVED
Bureau of Land Management

JUN 25 1984

Durango, Colorado

13

Area Manager 21.06.84.
San JUan Resource Area, BLM
102-Federal Building
Durango, CO 81301

Comments pertaining to Draft RMP/EIS for the San Juan-San Miguel planning area.

Support the Resource Utilization Alternative.

Rationale: Recreation & Land Use

The recration management as outlined by this alternative is attractive practical and reasonable. Since the majority of recreationist engage in semiprimitive motorized and roaded-natural jeeping or motorized (motor vehicle based) recreation the needs for the very popular recreation type should be respected. By using the RMP data p. 2-36; 437,000 RVD/ and compare this against the meager 12,500 RVD for White Water Boating (p.2-61) it becomes evident where the public interest is. Hunting and Fishing , mostly motr related, accounted for another 700,000 RVDs. This Alternative still protects the Dolores River for white water boating by managing as a SRMA. Then is no need to lock this WSA or any other WSA as a Wilderness Area. There are sufficient wilderness areas in existance or existing defacto in nearby government managed lands (by NPS,USFS, BLM, US FWS etc.) The local payroll and recreationist expenditures come over whelmingly from the non-wilderness type recreationist.

13-1 (138)

The RMP/EIS mentions at length the wilderness play areas and alte specific recommendations are made. But no such play areas are even mentioned for ORV recreationist. This RMP is unique that it does not even want to consider it compared to other Colorado BLM RAs RMP drafts Examplethe Piceance Basin Draft RMP (White River RA) on p.83 5th column considers such ORV play area. The ORV and semi primitive motorized (SEMI) recreation is as popular in SanJuan-San Miguel area. It appears the outdoors recreation planners and specialists lack the interest and/or expertise in a non wilderness recreation.

13-2 (130)

In Appendix 5 under your Preferred Alternative you mention vehicular closures to specific areas from where the motorized recreationist will be pushed out no less than 12 times; but not even once do you mention any areas where ORV or vehicular recreation will be promoted. You mention repeatedly giving a long list which areas are specifically reserved for the nonmotorized recreationist but not even one area as ORV play area. This Draft RMP is biased, a pro-wilderness document. Of the ~~XXXX~~ seven WSAs which the preferred alternative will return to multiple use management all but one will be closed to vehicular entry. You go to great length in your bias strangling motor based recreationist.

13-3 (131)

Sincerely,

Harry Melts
General Delivery
Porthill, Idaho 83853

14

SCR-1

STATE CLEARINGHOUSE REVIEW (SCS) PROCESS

(Upon completion return this form to the State Clearinghouse)

[ ] Application
[XX] Draft Environment Impact Statement
[ ] State Plan

TO: Bill Isaacs, Natural Resources Dept.
FROM: David F. Martinez, DFA, State Budget Division

The attached proposed action is submitted to you for review and comment. Please return this completed form by 7/6/84

A. Title DEIS San Juan/San Miguel Resources Management Plan
2. Applicant DOI/BLM/San Juan Resources
C. State Application Identifier (SAI) No. NM 84 05 01-002

1. To the best of your knowledge, does the proposed action conflict with any applicable statute, policy, order, or regulation?
[ ] Yes If "Yes" please cite conflict on the reverse side.
[X] No

2. Describe any concerns, suggestions or means of improving or strengthening the proposed action. Please note comments on reverse side.

3. Does the proposed action duplicate any activities which are geared towards the same target group?
[ ] Yes If "Yes" please identify on the reverse side.
[X] No

4. Identify the masterplan or the comprehensive plan that this proposed action relates to _____
Is the proposed plan compatible with the plan?
[X] Yes
[ ] No If "No" please cite conflicts on the reverse side.

5. Identify the block grant, if any, which the proposed action relates to.

RECOMMENDED ACTION

_____ Proposed action is supported
X Proposed action is supported with recommendations on reverse side
_____ Proposed action is not supported. Note comments on reverse side

Bill Isaacs 6-13-84 BNR
Reviewer/Date Agency

cc: [ ] Applicant: This acknowledges receipt of your proposed action and it is now under clearinghouse review.

14-1 (89)

The Wilderness Technical Supplement states that there are no known occurrences of Threatened or Endangered (T&E) plant taxa in any of the Wilderness Areas. (A few taxa of special concern are listed as potentially occurring in Dolores Canyon WSA but none is definitely known from that area.) This statement is misleading because it implies that there are no T&E taxa in these areas. It may simply mean that no one has ever looked for them. If this is true then a search for T&E plant taxa such as Phlox caryophylla, Astragalus oocalycis, and Lesquerella pruinosa should be done. There are undoubtedly other plant taxa which could be added to this list as well.

14-2 (140)

In addition, it is our understanding from conversation with the Colorado Natural Heritage Program that there are other areas of high potential for wilderness designation witain the Montrose District which were not considered in this EIS.

15

301 W. 25th St.
Durango, CO 81301
June 27, 1984

Area Manager
San Juan Resource Area
Bureau of Land Management
Rm 102, Federal Bldg
701 Camino del Rio
Durango, CO 81301

RECEIVED
Bureau of Land Management
JUN 27 1984
Durango, Colorado

Dear BLM:

Thank you for sending me the April Draft San Juan/San Miguel Resource Management Plan.

I commend you for your exhaustive documentation, but I cannot agree with the "preferred alternative" the BLM has recommended for the management of these lands, in that it does not truly reflect a balance of public interests.

15 (138)

In recommending only one of the proposed wilderness areas, the "prefered alternative," I feel, is weighted toward short-range economic exploitation, and slights the long-term interest of all the people of the United States, who will need unique and outstanding refuges such as these (more than we can imagine) in the times to come.

I urge you to take the long view, and to select at least a majority of the proposed wilderness areas for inclusion in the final management plan.

Thankyou.

Sincerely,
William C. Hobbs

16

6/27/84

Dear Sirs,

I am writing in support of more wilderness designations in your BLM land use proposal. I attended the hearing on 6/25/84 and agree with those who feel that:

16-1 (138)
1. Wilderness are a vanishing resource in an age of population overgrowth and industrial exploitation.
2. Presently designated wilderness areas are already over-used and more areas are needed to relieve this situation.
3. There is a need in San Juan county for more low-elevation wilderness areas for enjoyment in the Spring and Fall.

16-2 (46)
4. There is no pressing need to develop the minerals in these areas. We need to encourage renewable, non-polluting resources instead.
5. The archeological sites in these areas need perpetual protection status. Thank you for the chance to comment.

Sincerely,
Caroline Clark, M.T.
2911 C.R. 141
Durango, Colo. 8301

RECEIVED
Bureau of Land Management
JUN 29 1984
Durango, Colorado

17

LOUIS NEWELL

RECEIVED
Bureau of Land Management
JUL 9 1984
Durango, Colorado

June 22, 1984

Area Manager
San Juan Resource Area, BLM
701 Camino del Rio
Durango, CO 81301

Dear Sir:

17-1 (138) I am disturbed to learn that only one of the eight wilderness study areas has been recommended for wilderness when in your own words they are "nationally significant unique combinations of ecological and supplemental values."

17-2 (47) Particularly those areas that contain significant archaeological resources together with important wildlife habitats - Cross, Cahone and Papoose Canyons. Since these are to be off limits for mineral leasing anyway, it only makes sense to give them the extra protection of wilderness designation. Vandalism is an ever present problem at archaeological sites and this would be a measure of protection.

A few weeks ago, I was fortunate to be part of a hiking group into Menefee Mountain and was impressed to learn of the many kinds of wildlife present. I also discovered that big game hunting is common. Wilderness protection is obviously necessary in this lovely area. The same argument can be put forth for Weber Canyon.

Tabeguache Creek is unusual in that it changes from semi-arid desert to forest land. For those of us who love both, it provides a unique experience. Since there are no roads, it would seem a natural step to designate it as wilderness.

McKenna Peak has so much diversity; badlands, unique vegetation, wildlife, fossils, wild horses and wonderful scenery it really is most important that it have wilderness status.

I am pleased that the Dolores River Canyon has been recommended but would urge you to consider the other seven as equally important and unique.

Dorothy N. Newell

Dorothy N. Newell
3301 W. 4th Avenue
Durango, Colorado 81301

18

July 3, 1984

Area Manager
San Juan Resources Area
Bureau of Land Management
701 Camino del Rio
Durango CO 81301

Dear Sir:

18-1 (138) I would like to recommend for permanent Wilderness protection, Tabeguache Creek and McKenna Peak, the latter which contains a wildhorse herd, and spectacular scenery. Also, I believe Weber and Menefee Mountains should be protected, since they are home to bighorn sheep, mountain lion, and bear. The one area recommended by the Bureau

18-2 (139) of Land Management, Dolores River Canyon from Big Gypsum Valley to Bedrock, needs additional acreage in upper Coyote Wash and on Nyswanger Mesa.

Thank you for your consideration.

Sincerely,
Lorraine Lane

Mrs. Lorraine Lane
3505 W. 39th Ave
Denver CO 80211

RECEIVED
Bureau of Land Management
JUL 5 1984
Durango, Colorado

19

CHARLES R. BUTLER
GEOLOGIST
P O BOX 435
DURANGO, COLORADO 81301
WEST BUILDING
PHONE 247-1092

July 5, 1984

U.S. BLM - Area Manager
San Juan Resource Area
701 Camino del Rio
Durango, CO 81301

Re: Resource Management Plan
San Juan-San Miguel Planning
Area

Dear Sirs,

I appreciate this opportunity to comment on your proposed plans for managing the San Juan-San Miguel area. Overall I believe you have done a creditable job of balancing the various needs and desires of the users of the public domain as well as of the general public.

19-1 (141)

I suggest you reconsider your proposed boundary for wilderness designation of the Dolores River Canyon WSA near Bedrock. Your original boundary for the WSA in Sections 30 and 31 as shown on page 2-22 of the Wilderness Technical Supplement was essentially along the cliffs which border the westerly side of the Dolores River. The proposed boundary, as shown on your map on page 1-10, represents a major addition to the original study area. Major in concept and consequences if not in size.

This new proposal cuts off the land owners access to his own lands in Section 31. It also effectively prohibits the Bureau of Reclamation from developing potential salt water injection wells in Section 31. If the Bureau is forced to develop these wells in Section 30, the wells could be about 2000 feet deeper because of an E-W fault in the N1/2 of Section 31 which displaces the south side downward. The extra cost to the taxpayers could be in excess of a million dollars.

The attached plat shows the original WSA boundary and the new boundary in your present proposal. The plat also shows the Bureau of Reclamation potential injection well sites.

Solving the salinity problem in the Colorado River drainage system is in everyone's best interests. I request that you reconsider your proposed boundary and either return to your original proposed boundary along the cliffs in Sections 30 and 31 or make some other sensible accommodation to this problem.

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Bureau of Land Management
JUL 6 1984
Durango, Colorado

U.S. BLM - Area Manager
July 5, 1984
Page Two

19-2 (48)

Your proposal for wilderness status for the Dolores River Canyon WSA should take into account the probable loss of undeveloped natural resources. The potential for developing significant oil and gas reserves southerly from the Paradox anticline is very good. The southeasterly trend of uranium deposits from the Big Indian area indicates a fair to good potential for the eventual discovery of new deposits in the Chinle formation within the Dolores Canyon WSA.

Thank you for considering these comments.

Very truly yours,

Charles R. Butler

CRB:jd

20

2298 Priscilla, #2
St. Paul, MN 55108
July 6, 1984

RECEIVED
Bureau of Land Management
JUL 9 1984
Durango, Colorado

Area Manager
San Juan Resource Area, BLM
701 Camino del Rio
Durango, CO 81301

Dear Area Manager:

I would like to take the opportunity to comment on the Wilderness Technical Supplement of the San Juan/San Miguel Resource Management Plan. Having personal knowledge of the area through seasonal work on the range inventory, I have a good physical idea of the land and its potential.

No better decision could have been made regarding the Dolores River Canyon area. It displays high wilderness conditions, and although some conflicts exist, the geological, archeological, and recreational opportunities far outweigh development that would disturb such attributes. I do suggest that, in addition to the 28,630 acres recommended on the all wilderness alternative, 3 miles of Coyote Wash and Nyswonger Mesa be added. There should be no development of a gravel pit or recreation facilities for rafters near Bedrock. The uniqueness of the Bedrock area lies in its undeveloped character. I realize the site is impacted by rafters and kayakers. River users should know to take care not to degrade the river bank site. Most do. Development of recreation facilities could invite opportunities for less compatible uses, such as much larger gatherings.

20-1 (139)

20-2 (129)

No development of a salt injection system should take place. I'm skeptical of the process and the benefits derived from such a project. The La Sal Creek portion should extend to the Cashin Mine. I've walked the the length of La Sal Creek from the Dolores to the Cashin Mine and found this to be excellent riparian habitat, remote, and a grand extension of the Dolores River system.

I'm very disappointed with the non-recommendation for the McKenna Peak area. Again, I have travelled much of the area and have knowledge of the range conditions, the striking badland topography, the wild horse herd, and the mountain mahogany/scrub oak vegetation type.

20-3 (138)

The area should be recommended for wilderness; boundaries should follow topographic contours as delineated in the RMP; transfer of state lands to the BLM has potential. I feel the conflict resolution (# 1) does not aptly address salinity problems in the area. Construction of a livestock resevoir is perhaps a valid project (conflict resolution, # 2). However, considering the range condition in the area, I question whether more intensive livestock grazing is warranted.

Tabeguache Creek presents little conflict and should be designated as wilderness. A small portion to be managed as a natural area affords little protection for this area that drains the Uncompahgre Plateau.

The preferred alternative for both Wier and Menefee Mountains are contradict the criteria that allows an area a suitable recommendation. Plans for no oil and gas development, and no coal development, with emphasis on recreational opportunities, suggests a wilderness recommendation. Why stop short of such a recommendation?

The Cross, Cahone, and Squaw/Papoose areas are resplendant with archeological history. This attribute in addition to the ancientness one feels when hiking in these areas lend to their need for protection. The preferred alternatives note that development would be prohibited to an extent due to expenses from directional drilling, I do not understand the incongruent management stance on resource development when pre-FLPMA leases can proceed with unconstrained development and newer leases may not. I believe the impacts from the development of the pre-FLPMA leases should be spelled out more clearly on p. 3-9. Impacts from the pre-FLPMA leases should also be outlined more clearly for the wilderness alternative on p. 3-4.

20-3 (138)

Having performed range inventories in this area, I witnessed lease development of overlooking mesas. I'm perplexed and can't resolve in my own mind recommendation for or against wilderness when pre-FLPMA leases could affect the management and condition of the areas.

Other comments

20-4 (49)

- On p. 2-5 - "Approximate percent in WSA" means what? Does this mean percent area, or percent of the number of oil and gas leases? (See column titles.)

20-5 (102)

- I wish not to make a lengthy comment on the the grazing section of the plan. I know the resource area to be in poor condition for the most part. I support range improvement where suitable. It can be done, as exemplified by work done on an allotment in the Spud Patch area. ((can't remember the operator's name, but he and the BLM should be complimented!)
- Cheers to the Anazasi Cultural ACEC. This portion of Colorado is magnificent. REcognition and protection of its cultural significance is necessary.

Thank you for the opportunity to comment. I'll never forget the chance to work in such an area.

Sincerely,

Lynn Cudlip

21

AMERICAN MINING CONGRESS
FOUNDED 1897
SUITE 300
1920 N STREET NW
WASHINGTON
DC 20036
202/861-2800
TWX 710-822-0126

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N.T. Camicia, Greenwich †

* Immediate Past Chairman
† Honorary

June 21, 1984

RECEIVED
JUN 26 '84
B.L.M. Montrose Dist

Mr. Paul Arrasmith, District Manager
Montrose District Office
Bureau of Land Management
2545 South Townsend
Montrose, Colorado 81401

Dear Mr. Arrasmith:

Reference your letter concerning Powderhorn. I requested an answer from the BLM Washington office, as to whether or not wilderness study policy governed in the case of Powderhorn. I have not received a reply.

In the San Juan/San Miguel Resource Management Plan, EIS or wilderness technical supplement, I have been unable to find an analysis of Factors 2 and 3 (Federal Register, February 3, 1982; 5107). That is, I find no explicit assessment of opportunities for solitude or primitive recreation within a day's driving time (five hours) of an SMSA or a consideration of 1) other agency areas that have been recommended as suitable for wilderness by the President; 2) USFS "further planning" areas, and all other federal and state lands under wilderness review.

21
(142)

Perhaps you would be kind enough to point out the location of the factors that I have no doubt missed in my review.

Thank you kindly for your consideration.

Sincerely,

Thomas C. Nelson
Assistant to the President

22

RECEIVED
Bureau of Land Management
JUL 10 1984
Durango, Colorado

THE UNITARIAN UNIVERSALIST CHURCH OF BOULDER
5001 Pennsylvania Avenue, Boulder, Colorado 80303 • Ph 494-0195

FORREST WHITMAN, DMn, Minister
JAMES SCHOTT, Director of Religious Education
CARROL KALAFUS, Administrator

July 8, 1984

Area Manager
San Juan Resources Area, BLM

Greetings, Some of us are just back from walking into some of your lands near Mesa Verde. Quite a spiritual place! Hope you can declare a wilderness there. Cordially, Rev. Forrest Whitman

22
(138)

No. 31 - 84

23

Dr. Bettie E. Willard
1529 Columbine Avenue
Boulder, Colorado 80302

RECEIVED
Bureau of Land Management
JUL 10 1984
Durango, Colorado

July 7, 1984

Area Manager
San Juan Resource Area
Bureau of Land Management
Room 202, Federal Building
701 Camino del Rio
Durango, Colorado 81301

Dear Sir:

Thank you for the opportunity to respond concerning the recent draft resource management plan released on the San Juan Resource Area. I am familiar with much of that area and its botanical significance. I would like to go on record as supporting your designation of two (2) sites as Areas of Critical Environmental Concern and one (1) site as a Research Natural Area.

23
(83)

The nominated ACEC's on East Paradox Creek and Spring Creek are of high scientific significance. As you know, there are a number of serpentine soil sites throughout Paradox Valley that support populations of narrow endemic species, and the East Paradox ACEC appears to include at least one of these, which is important to preserve, because some of these plants on these sites do not grow anywhere else in the world. The Spring Creek site and the proposed RNA site on Coyote Wash are also important for the same reasons. I know you know the various species there, which I will not enumerate.

If I can be of further help in assisting you to consummate the formulation of these three resource areas, I will be happy to do so. Thank you for asking my opinion.

Sincerely,

Beatrice E. Willard, Ph.D.,
Ecologist
cc: Ms. Tamara Naumann

24

RESOLUTION
OF
THE BOARD OF MONTROSE COUNTY COMMISSIONERS

CONCERNING: Designation of the Dolores River as a Wild and Scenic Area and Designation of the Tabeguache Canyon as a Wilderness Area

WHEREAS, the Montrose County Commissioners are elected to represent the people in Montrose County; and

WHEREAS, the overwhelming majority of Montrose County residents concur with the multi-use concept of public lands; and

24-1
(143)

WHEREAS, wilderness areas and wild and scenic areas do not allow for the multi-use of public lands; and

WHEREAS, land use control is a local concern; and

WHEREAS, the Tabeguache and Dolores Canyons are zoned agricultural open; and

WHEREAS, there are sufficient wilderness areas in Colorado now; and

WHEREAS, the Dolores River does not flow continuously through the summer months; and

WHEREAS, the designation of any area in Montrose County as either wilderness or wild and scenic areas would be usurping the authority of the Montrose County Commissioners to control and direct land use in Montrose County;

24-2
(138)

NOW, THEREFORE, BE IT RESOLVED that the Board of County Commissioners of Montrose County recommend that the Dolores and Tabeguache Canyons continue to be administered under the multiple-use concept.

APPROVED AND ADOPTED this 6th day of July, 1984.

BOARD OF MONTROSE COUNTY COMMISSIONERS

(SEAL)

Robert D. Corey, Chairman

Lynn Thomas, Vice-Chairman

ATTEST:

Neil Reams, Member

Ruth E. Heath
Ruth E. Heath
County Clerk and Recorder

BY: Patricia Vernon
Patricia Vernon, Deputy Clerk

RECEIVED
Bureau of Land Management
JUL 11 1984
Durango, Colorado

25

COLORADO HISTORICAL SOCIETY

The Colorado Heritage Center 1300 Broadway Denver, Colorado 80203

July 6, 1984

Paul W. Arrasmith
District Manager
Bureau of Land Management
701 Camino del Rio
Durango, Colorado 81301

RE: San Juan/San Miguel Resource Management Plan

Dear Mr. Arrasmith:

This office has reviewed the above draft management plan and have the following comments:

1. The cultural resources being managed by the Bureau of Land Management (BLM) in this resource area consist of some of the most important sites in Colorado as well as the nation. We therefore are in favor of the designation of the Anasazi Cultural Multiple Use Area as an Area of Critical Environmental Concern (ACEC). However, with the designation of the area as an ACEC must come stipulations to insure the protection of these resources. The stipulations listed on page 1-37 under Cultural Resources should be incorporated into the management of the area. 25-1 (3)

2. We request the opportunity to review the Cultural Resource Management Plans (CRMPs) as they are developed for the important cultural sites or areas listed on page 2-40 through 2-44. The Hanging Flume, which is on the National Register of Historic Places, should be added to the list of important sites and a CRMP developed for it. (The Hanging Flume should also be added to the list of sites on the National Register on page 2-39, paragraph 2 under Cultural Inventories). 25-2 (2)

3. We recommend that the BLM develop plans to nominate individual sites or districts to the National Register. Mockingbird Mesa, for instance, should be nominated as a district and Sand Canyon Ruin, which has been determined eligible to the National Register, should be nominated as a site. The BLM might consider requiring cultural resource consulting companies or schools etc. who work in the areas or on the individual sites to complete a National Register nomination form in conjunction with their work. (Crow Canyon School at Sand Canyon Ruin) 25-3 (4)

We look forward to working with the BLM concerning the cultural resources in this area. If this office can be of further assistance, please contact the Compliance Division at 866-3392 or 866-3395.

Sincerely,

for Barbara Sudler
State Historic Preservation Officer

BS/WJG:as

cc: DeWitt John

RECEIVED
Bureau of Land Management
JUL 12 1984
Durango, Colorado

26

John Spezia
Box 2255
Steamboat, Co
80477

July 9 1984

Area Manager

26 (138)

I have just received a brief synopsis of the BLM wilderness recommendations last week. I am confused by your recommendations... you recommend neither wilderness nor minerals, protection nor exploitation ... in essence the land is in total limbo to be managed when ever enough force and power and money and influence moves this public land in a direction of momentary need...

This is not the way to manage land. At the moment there is an ever-increasing need for wilderness recreation as well as a future need that we will be hard pressed to fulfill.

I earn a major portion of my living by guiding people through not only the San Juan's, but a multitude of other wilderness areas in Colorado. This is a resource that will never run out like minerals, oil, gas, etc... and it provides a living for others who supply transportation, food, lodging, meals & gas to live in these wilderness areas.

Let us save & protect our most important natural resource as well as our all-important economic tourist industry by providing a place, a wilderness place for tourist to enjoy .. and jobs for our selves.

Sincerely
John W. Spezia

RECEIVED
Bureau of Land Management
JUL 12 1984
Durango, Colorado

27

UNITED FOUR WHEEL DRIVE ASSOCIATIONS
of U.S. and CANADA
8900 N. Camino de Anza Tucson, AZ 85704

RECEIVED
Bureau of Land Management
JUL 13 1984
Durango, Colorado

Mr. Paul W. Arrasmith, District Manager
San Juan Resource Area - Montrose District
Bureau of Land Management - USDI
Federal Bldg.
701 Camino del Rio
Durango, CO 81301

July 10, 1984

RE:Resource Management Plan Draft EIS

Dear Mr. Arrasmith:

Thank you for this opportunity to comment on your proposed management plans for this very significant ORV recreation area. The San Juans area of Colorado is known as the "Jeep capital of the world" and recreational 4-wheelers come from every corner of the world to enjoy the spectacular veiws and history of this unique area. As a matter of fact United Four Wheel Drive Assoc. is having its annual meeting in Ouray this year. You've recognized this by your statement that "the Silverton Special Recreation Area recieves over 437,000 annual visitor days of use and has over 500 miles of "maintained" Jeep trails and many more "unmaintained" Jeep trails" and that "ORV is a major economic impact to the area with over $28 million annually".

Your proposed management alternative appears to a very good compromise for the various competitive land users. You recognize the importance and legitimacy of recreational 4-wheeling by maintaining the Silverton SRMA and possibly increasing the semi-primitive motorized recreational opportunities. You have left 79% of the area "open", 11% "limited" with only 10% of the area "closed" to ORV use. This seems to fall in line with your stated planning criteris of "make public lands available for public needs, manage within the lands capacity on a sustained yield basis, and ensure availablity of recreational opportunities by providing public access".

The only part of your Draft EIS that I can find serious fault with is your statement that "non-wilderness status (of areas in this RMA) would have longterm adverse impacts on wilderness & the primitive recreation status of WSA's with a national loss of (wilderness) ecosystems". This shows definate bias towards the use of this area for exclusive wilderness use. For one thing this entire area is honeycombed with old mining activities (roads, mines, etc.). That is why there are so many excellant 4WD trails. The "Jeep trails" weren't built by "jeepers" for the exclusive use of "jeepers". Secondly the "loss" of wilderness opportunities is absurb. As you have stated there are "57 wilderness areas in the vicinity now totalling more than 2.5 million acres" (with more to be added soon). And over "160 wilderness areas in the region". It is not that UFWDA is opposed to "wilderness", its just that we feel there are enough wildernesses now for those that enjoy that form of recreation. What we oppose is the "taking" of areas with good 4WD trails that we presently use and declaring them "roadless" and "making" them into wilderness. These "man-made" wildernesses are not true wilderness and only prevent the recreational 4-wheeler from use of the public land. We enjoy these primitive areas as much as any one, its just that we use a different form of conveyance to get to the "Wilderness experience".

Sincerely,
Stu Bengson
Stu Bengson, Director Land-Use

RESPECT...PROTECT...AND ENJOY: LAND, WATER, MOUNTAINS, AND SUN RESOURCES

28

4838 N. Lariat
Castle Rock, Colo. 80104
JUly 10, 1984

Area Manager
San Juan Resource Area, BLM
701 Camino del Rio
Durango, Colo. 81301

Dear Sir: (Madam ?!)

28 (138)

I am writing to request a more finite designation for the Anasazi Cultural Area. It would be more permanent and secure if the Cross, Cahone, and Squaw/Papoose Canyon areas wer designated Wilderness. I have come to see Anasazi areas as our American classic ruins and very much worth perserving forever.

If it were possible for more and more people to become familiar with this ancient culture, we would have a tourist industry in our southwest the likes of which has never been seen!

Thank you for considering this vast area as wilderness, with a more stringent management.

Yours sincerely,
Shirley B. Shepherd

RECEIVED
Bureau of Land Management
JUL 17 1984
Durango, Colorado

29

1984 OFFICERS
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The Colorado
MINING ASSOCIATION

RECEIVED
Bureau of Land Management
JUL 13 1984
Durango, Colorado

1984

Area Manager
U.S. BLM
San Juan Resource Area
701 Camino del Rio
Durango, Colorado 81301

Re: Resource Management Plan
San Juan-San Miguel Planning Area

Dear Area Manager:

I would like to comment on your proposed plan for managing the San Juan-San Miguel Planning Area and wish to refer to comments made by Charles R. Butler of Durango.

I would like to endorse Mr. Butler's thoughtful comments on boundary adjustments. I certainly think that you should take into account his suggestion that you return to the original proposed boundary.

I would also express concern about your proposal for wilderness status for the Dolores River Canyon WSA. As Mr. Butler points out, there are opportunities for mineral discovery here. Mineral development would not necessarily be incompatible with other uses of the land.

29
(141)

With kind regards.

Very truly yours,

Stanley Dempsey
Vice Chairman - Public Lands

cc: David R. Cole
John Henderson, Esquire
Sylvia J. Sitzman

410 Denver Hilton Office Building
1515 CLEVELAND PLACE

Build Colorado Mining

DENVER, COLORADO 80202-5192
TELEPHONE (303) 534-1181

30

11 July 1984

Dear Manager:

As a frequent visitor to the Mesa Verde area (and particularly some of the lands adjacent to the national park itself), I feel very badly to learn that the BLM has rejected wilderness designation for much of this beautiful and still-wild region.

Of course the Dolores River Canyon needs to be protected for posterity, but it seems to me that some of these other WSAs under your jurisdiction are just as worthy. I would stronlgly like to see some of these other beautiful canyons in the region protected--forever--from development, mineral exploration, and the like.

I guess I feel most upset about the wonderful Anasazi ruins which seem particularly worthy. I understand that the BLM has the area pegged as one of critical concern, but I think outright wilderness protection is what is needed.

30
(138)

I know that I speak for my family of nine--7 of us are voters in Colorado--who grew up here loving this region and also wishing for its permanent protection.

We realize that you are forever having to make compromises and choices and that yours is not an easy job, but we do hope the BLM will reconsider on its recommendations on this San Juan plan.

Sincerely,

Nina Johnson

Nina Johnson
747 12th
Boulder, CO 80302

RECEIVED
Bureau of Land Management
JUL 13 1984
Durango, Colorado

31

Dear Sir
After attending the B.L.M. Meeting
It is very obvious the area
needs these wilderness areas
The fact you considered them
in the first place is commendable.
Have them a second Survey.
Appreciate your time and
the way the meetings were held
Adeline Bucay 579 Sawmill Rd Nro.

31
(138)

RECEIVED
Bureau of Land Management
JUL 13 1984
Durango, Colorado

32

Shell Western E&P Inc.
A Subsidiary of Shell Oil Company

P.O. Box 991
Houston, Texas 77001

July 12, 1984

RECEIVED
Bureau of Land Management
JUL 16 1984
Durango, Colorado

Area Manager
San Juan Resource Area
Bureau of Land Management
Room 102, Federal Building
701 Camino del Rio
Durangeo, CO 81301

Gentlemen:

As requested, we have reviewed the Draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for the San Juan - San Miguel resource planning area in Southwestern Colorado. We offer the following comments with regard to the proposed RMP.

1. As you are aware, Shell Western E&P Inc.'s interest in the resource planning area is in developing carbon dioxide (CO_2) reserves for tertiary oil recovery.

2. We have made significant investments in the resource planning area to improve and protect the environment by 1) providing funds to help rebuild the Bradfield Ranch Bridge and improve roads in the area; 2) making extensive archaeological surveys to avoid sites and where this was not possible, "digs" to recover artifacts; and 3) helping to provide an acceptable CO_2 project Environmental Impact Statement. We would object to any RMP which would impose significant additional restrictions to our developing CO_2 reserves.

3. Our assessment of the four alternative management plans indicates that the Resource Conservation Alternative would be the least desirable since it would impose additional restrictions by limiting access to certain areas within the planning area. Such additional restrictions would be costly to the continued development of CO_2 reserves; whereas, we have demonstrated that we are both willing and able to protect the environment within the present administration of BLM policy.

4. The Current Management Alternative and the Resource Utilization Alternative would impose the least restrictions on our operations in the planning area. Therefore, we would prefer one of these plans since they are more consistent with the previously approved CO_2 EIS.

5. We understand the need for a broad-based plan which attempts to integrate all resources into a single unified program of management; however, our plans for developing the McElmo Dome and Doe Canyon

areas have been based on the provisions as agreed to by the various governmental agencies having input into the CO_2 EIS.

We appreciate the opportunity to comment on the Draft Resource Management plan. We trust a management plan will be selected which is fair and equitable to our interests in developing CO_2 reserves in the planning area.

Very truly yours,

George L. Carlson

George L. Carlson
Division Production Manager
Mid-Continent Division

WGH:JB

33

RECEIVED
Bureau of Land Management
JUL 16 1984
Durango, Colorado

CHARLES H. WALLACE
4382 WEST ANIMAS ROAD C.R. 203
DURANGO, COLORADO 81301
(303) 259-3207

Manager, San Juan Resource Area
Bureau of Land Management
701 Camino del Rio
Durango, Colorado 81301

7/11/84

Dear Sir,

I regret being unable to attend the public hearing in Durango the evening of June 25th. I've made a career in the petroleum industry, and am in favor of responsible exploitation of our limited resources. Our few remaining wilderness areas must be counted among our most precious resources. Your plans to designate the ACEC west of Cortez, and to limit development within the eight Wilderness Study Areas in your jurisdiction are a step in the right direction. I do not, however, think protection of these unique areas should be contingent upon administrative whim. The disposition of these wild areas should be set aside for future generations to decide. A wilderness designation would also insure that the resources in these areas would always remain available for times of urgent need.

I strongly feel we should make the deliberate effort to save for our grandchildren the wilderness our fathers so accidently left for us.

33 (138)

Thank you for your consideration in this matter.

Yours truly,

Charles H. Wallace

34

RECEIVED
Bureau of Land Management
JUL 16 1984
Durango, Colorado

FORT LEWIS COLLEGE
DURANGO, COLORADO 81301

July 12, 1984

Area Manager
San Juan Resource Area, BLM
701 Camino del Rio
Durango, CO 81301

Dear Sir:

I would like to add my voice to those who have strongly objected to your choice of only 1 of 8 proposed wilderness ~~areas~~ ACEC under your jurisdiction.

My background is that I am a Ph.D. chemist. Thus I am not a believer in locking up all natural areas. I.e., I understand full well that many of my chemicals come from mineral resources. My background also includes the fact that I teach mountaineering at Fort Lewis. As a result, I have hiked in all but two of the above eight proposed areas.

34 (138)

I believe the 8 areas qualify for wilderness status, especially the Weber and Menefee Mountain areas and the Cross, Cahone and Papoose Canyon areas. My position is that should the country need to develop these tracts of land at a future date, the resources will still be there. Until such time, I cannot understand your unwillingness to protect these lands with wilderness status.

Sincerely,

John M. Ritchey

John M. Ritchey
Professor of Chemistry

JMR/lab

35

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA 22092

In Reply Refer To:
WGS-Mail Stop 423

JUL 11 1984

Memorandum

To: Area Manager, San Juan Resources Area, Bureau of Land Management
Durango, Colorado

From: Assistant Director for Engineering Geology

Subject: Review of draft environmental statement and Wilderness Technical Supplement for San Juan/ San Miguel Resource Management Plan, Colorado, New Mexico, and Utah

We have reviewed the subject documents as requested in the District Manager's notice.

Inasmuch as most of the surface water of the area is considered to be biologically polluted (supp: p. 2-8, 2-13, 2-27, 2-31), the probable sources of the drinking water for the proposed recreation sites should be indicated, and water treatment should be addressed. The nature of the planned sanitary facilities and their maintenace should also be described (p. 2-36). 35 (132)

for James F. Devine

RECEIVED
Bureau of Land Management
JUL 16 1984
Durango, Colorado

36

adrift adventures inc.

OWNERS/OPERATORS PATRICK AND ROBIN TIERNEY
1816 ORCHARD PLACE • FT. COLLINS, CO 80521 • (303) 493-4005

7/12/84

BLM
San Juan Resource Area
701 Camino del Rio
Durango, CO 81301

Dear BLM,

I recently read about your Draft San Juan RMP. I would like to make several comments for the record.

36-1 (139; 144) I was very pleased to see your recomendation of the Dolores River Canyon for wilderness. I have boated that section for years and it has all the necessary characteristics. The proposal needs, however, to protect more area. Certainly more of Coyote Wash needs wilderness status, because it is so very unique. Elsewhere, the viewshed from the river needs protection since this is the heart of the area.

I hope that wilderness status does not mean that rafting on the subject section will be severely limited. Some use limits are necessary but consideration for past use needs to be recognized.

36-2 (2) Establishment of the Anasazi Cultural Area ACEC is an excellent idea, if it affords the same protection as wilderness status. Does it?

I feel the area is generally overgrazed and would recomend more reductions in AUMs or drastic season of use changes.

Thanks for the opportunity to comment.

Sincerely,

Patrick Tierney

RECEIVED
Bureau of Land Management
JUL 17 1984
Durango, Colorado

37

UNIVERSITY OF COLORADO WILDERNESS STUDY GROUP

PEREGRINE FALCON

Susan Graves
Wilderness Study Group
UMC 188
University of Colorado
Boulder, CO 80309

RECEIVED
Bureau of Land Management
JUL 17 1984
Durango, Colorado

Area Manager
San Juan Resource Area, BLM
701 Camino del Rio
Durango, CO 81301

7/11/84

Dear Sir,

We would like to submit our comments on the Bureau of Land Management's wilderness recommendations from the San Juan/San Miguel RMP and EIS. We find it difficult to deduce the reasoning behind the recommendation of only one, the Delores River Canyon, out of eight potential areas. Those areas do have, in BLM's own words, "nationally significant unique combinations of ecological and supplemental values". In many of the areas no mineral leasing and no ORV use is proposed, yet they are not recommended for wilderness. Instead, administrative protection is proposed; a protection subject to every different administration's whim. The intent of protecting the areas is good; it is not, however, a substitute for Congressional wilderness designation, and will not suffice. 37-1 (138)

Our comments on the areas:

Cross,Cahone, and Squaw/Papoose Canyons: These areas possess amazing archeological resources, as concentrated as 100 sites per square mile. The scientific and educational value of these is immeasureable, and they must be protected. There is also riparian wildlife habitat, which

UNIVERSITY MEMORIAL CENTER BOULDER, COLORADO 80302 (303) 492-6822

-2-

houses a terrific diversity and concentration of species. The Great Basin sagebrush ecosystem of these areas is not represented anywhere else in the National Wilderness Preservation System. The Area of Critical Concern (ACEC) proposal for Anasazi is a good step, but it does not fulfill the need for wilderness protection of these areas, especially as the ACEC designation would require increased management while the BLM is having difficulty managing its land with its present staff. 37-1 (138)

Weber Mountain and Menefee Mountain: These areas play host to bighorn sheep, deer, mountainlions, and bear. Many of these species are disappearing rapidly from Colorado; their habitat is critical to their survival. We must ensure their habitat will exist into the future by protecting it permanently.

McKenna Peak: These shale badlands, encompassing a vegetational transitional zone from saltbush-greasewood to Douglas Fir, contain wildlife winter range, a wild horse herd, fossils and incredible scenery. Why NOT wilderness?

Tabeguache Creek: A 560 acre administrative natural area is not an acceptable substitute for what should be 7,908 acres of wilderness. This area contains a continuum of ecosystems from semi-arid desert to subalpine forest. These continuous tracts of land are necessary to support the wide diversity of wildlife and complex network of species living within them. It is also one of the few unroaded drainages of the Uncompahgre Plateau. Wilderness designation is necessary to protect these attributes.

Dolores River Canyon: We thank the BLM for recommending most of this area for wilderness. However, we feel the upper 3 miles of Coyote Wash and Nyswonger Mesa should also be included in the recommendation, as it would increase the diversity of the area. 37-2 (139)

-3-

37-3 (103) The grazing plan for public rangeland has no real alternatives. All four "alternatives" leave 27% to 36% of the range in poor condition; the plan must provide alternatives that would result is significant improvements in the range condition.

37-4 (133) The plan calls for 79% to 95% of planning area to be open to unlimited ORV use.This is not enough range of alternatives; some proposal should have a significant reduction in the area open to unrestricted ORV use.

We thank the BLM for this opportunity to influence their Resource Management Plan, and we are confident our recommendations will be given serious consideration.

Sincerely,

Susan Graves

Susan Graves
For the Wilderness Study Group

7-16-84

38

Bob Hyder and Dave Miller:

The San Juan/San Miguel Resourse Management Plan was subjected to heavy criticism by those who attended the public hearing on the 25th. of June. The overwhelming demand was for more Wilderness designation. Many valid arguments were presented in favor of securing all the WSAs from the unfortunate consequences of Multiple-Use. These arguments are a matter of public record and there is no reason to repete them here.

It has come to our attention that the personnel at Hovenweep National Monument are in the process of developing a management plan of their own. Three of the WSAs are very close to the present boundaries of the park—these being Cahone Canyon, Cross Canyon, and Squaw/Papoose Canyon. We all know that Federal agencies are required by law to cooperate with one another, but with regard to these three canyons it appears that BLM and the Park Service are working at cross purposes. This is the dilemma we would like your help in solving.

38 (5) We are hereby making the proposal that BLM and the Park Service work together towards the goal of expanding Hovenweep Monument to incorporate Cahone Canyon, Cross Canyon, and Squaw/Papoose Canyon. This exchange of land between the two agencies is a resonable way of protecting some of the last unexplored areas of prehistoric cultures, notably the Anasazi Culture. To date the necessary archaeological research has not been done in these canyons—as almost everyone agrees.

We therefore request from you, Dave Miller and Bob Hyder, a serious consideration of our proposal before the two independent plans go much further, and it becomes more and more difficult to change them. Clearly then the Park Service and BLM must respond quickly if all resonable alternatives are to be considered in their strongest possible way. We await word from you then, and look forward to a discussion and evaluation of our idea.

Thank you:

Glenn J. Parton

Glenn Parton
736 5th. St.
Apt. one
Durango, Co. 81301

RECEIVED
Bureau of Land Management
JUL 17 1984
Durango, Colorado

39

Dear Ma'am or Sir

Out of 8 Wilderness Study Areas in the San Juan/San Miguel RMP only one has been recommended for Wilderness classification. The other 7 areas are unique by your own admission; why then are they being denied permanent protection? 39 (138)

We have here an opportunity to protect wildlife habitat, archeological treasures and scenery of incredible beauty. Let's do it.

Sincerely
John Domingue

JOHN S. DOMINGUE
2051 S. SHERMAN
ENGLEWOOD, CO 80110

RECEIVED
Bureau of Land Management
JUL 18 1984
Durango, Colorado

40

conoco

E. Fred Birdsall
Public Lands Coordinator

Conoco Inc.
555 17th Street
Denver, CO 80202
(303) 291-6123

July 16, 1984

RECEIVED
Bureau of Land Management
JUL 18 1984
Durango, Colorado

Mr. Dave Miller
BLM - SJRA
102 Federal Building
701 Camino del Rio
Durango, CO 81301

Dear Mr. Miller:

Re: San Juan/San Miguel RMP/EIS

The San Juan/San Miguel RMP is a thoughtfully written and well-documented study. My comments relate largely to the oil and gas (including CO_2) potential of the area. They are qualified not only by reading the RMP but also by personal visit to the RA and conversations with the authors.

With one exception (my preference of Wild & Scenic River designation for Dolores Canyon instead of Wilderness), I support the preferred alternative. It is an effective blend of the best parts of the other alternatives. The primary conflicts with oil and gas development in the RA appear to be with cultural (Anasazi) and potential wilderness. The other "affected environments" are not, in general, in any great conflict with oil and gas.

With regard to cultural conflicts, the RA is fortunate to have Shell's McElmo Dome experience as indication of the high degree of cooperation that can exist to insure effective coexistence between cultural preservation and oil and gas development. Indeed, the relationship has been symbiotic; without the provocation of development, most of the Hovenweap-Yellow Jacket area would have remained unsurveyed for archeologic sites. I appreciate the BLM's concern that facilitated access could enable vandalism of many Anasazi sites. Statutory protection exists, however, so the problem therefore appears to be one of management . . . policing, patrols, etc. . . . and it could be argued that the same access that enabled vandalism also provides policing access. In any event, the BLM's management concerns, the intent to develop CRMP's, and other management intentions as described in the preferred alternative appear to be professionally developed to reckon with the problem of adequate protection for cultural resources.

My greatest concern lies with the possibility that large areas with petroleum or CO_2 potential might be withdrawn by wilderness designation, and it is to that danger that my comments are primarily directed.

The high subsurface potential of the eight WSA's is testified to by both industry--in terms of leasing and ACMP designation--and government--in terms of KGS designation, neighboring Utah's non-suitable rating for their side of the WSA's spanning the two states, and your own geologic studies. Indeed, industry's

high interest is reflected in pre-existing rights or claims on seven of the eight WSA's (excluding Tabeguache) seriously clouding their merit for designation. This is recognized in the RMP, and is one of the reasons why special management forms (ACEC, ONA, No Surface Occupancy, etc.) in the preferred alternative have been selected. The Bureau is to be commended on a judicious choice of non-wilderness management options for most of the conflict areas, options which more than adequately protect environmental resources while permitting essential access and leasing opportunity.

Both nationwide and in Colorado, the areal extent of wilderness (actual and proposed) greatly exceeds the areal extent of high promise oil and gas lands. USGS Circular 902* (which should be in your bibliography) states that in Colorado only 5 percent of the state's wilderness (actual or candidate) lands have medium to high petroleum potential. Those high to medium potential wilderness lands all lie in the Uinta, Paradox, and San Juan basins, and they are all BLM (non-USFS) WSA's. Given the importance of domestic energy to the U.S. in terms of energy independence, balance of payments, national security, and other important national concerns, one is led to question why any of the San Juan/San Miguel WSA's should be recommended for wilderness. Certainly the general area contains abundant alternates--the Weminuche, Big Blue, Mesa Verde, Lizard Head, Mt. Sneffels, and Black Canyon Wildernesses give vast opportunity close by for the wilderness experience.

40-1 (138)

The Dolores River is the only WSA (under the preferred alternative) to be recommended for wilderness. Its rough terrain is cited as too inhospitable for drill rig siting. While this may be true for the canyon itself, the high potential for natural gas under Dolores River WSA is certain to provoke continuing exploration interest. It appears preferable, therefore, to consider an alternate designation which would anticipate and permit exploration and rig siting up to the canyon's edge . . . perhaps a Wild & Scenic River designation or similar protective measure as you mention under the No Action Alternative.

An additional reason for permitting access right up to the canyon rim is the opportunity for spectacular overview access from ORV roads at the canyon edge. Buck Mesa, Anderson Mesa, and Bull Canyon have marvelous overview opportunities that would not disrupt inner canyon wilderness values, but would be withdrawn by road closures under the Dolores River current adjusted boundaries.

40-2 (145)

Incidentally, I object to the use of "vehicle way" as a means to escape "road" designation. In this arid climate and soil type, most off-highway roads do not require mechanical improvement and maintenance to provide access. "Vehicle way" appears artificially contrived to accommodate a "roadless" designation, not recognizing the fact that many "ways" are regularly used for passage, not even necessarily by ORV's.)

*Geological Survey Circular 902-A-P, Petroleum Potential of Wilderness Lands in the Western United States, 1983.

40-1 (138)

Further reason for non-designation of Dolores Canyon, outside the oil and gas potential and the overview opportunity is the WSA's high rating for base and precious metals, uranium, and vanadium. Finally, there is the problem posed by drainage if the WSA is not itself leasable.

All told, the reasons for non-designation of Dolores River considerably outweigh the reasons for designation, and an alternate provision for Dolores River management should be sought. This, of course, leaves the San Juan/San Miguel without any recommended wilderness. We do not believe it is essential that every RA and every District have a wilderness. Nature and history have endowed the San Juan/San Miguel with high quality archeologic, petroleum, CO_2, and surface resources. Management options exist to accommodate harvest of the subsurface resources and protection of the coexisting surface resources without wilderness withdrawal, and I urge you utilize those non-wilderness management options throughout the RA.

Yours very truly,

E. Fred Birdsall

E. Fred Birdsall

bp

41

July 15 84

MANAGER;

I AM UTILIZED THE DOLORES CANYON STUDY TIMES RECREATIONALLY AND I AM HAPPY TO SEE THAT THE RIVER CORRIDOR TO OUR MINERAL CRAVING IS [illegible]

41 (133)

OUR R.M.P. FOR SAN JUAN/SAN MIGUEL HOWEVER, I DON'T UNDERSTAND YOUR ALTERNATIVE OF NO SURFACE USE THE PLANNING [illegible] — A SUBSTANTIAL REDUCTION IN OUR [illegible]

I AM ALSO PLEASED TO SEE THE ANASAZI CULTURAL A.C.E.C. — [illegible] CONGRESSIONAL [illegible] DESIGNATION? WE MUST [illegible] THESE UNIQUE ARCHEOLOGICAL RESOURCES

RECEIVED
Bureau of Land Management
JUL 18 1984
Durango, Colorado

Sincerely, Kreuca

42

Area Manager
San Juan Resource Area
Bureau of Land Management
701 Camino Del Rio
Durango, Colorado 81301

July 15, 1984

RECEIVED
Bureau of Land Management
JUL 18 1984
Durango, Colorado

Dear Sir:

I am writing in regard to the recently released BLM recommendations for the San Juan/San Miguel Resource Management plan. It seems very one-sided in recommending only one out of eight Wilderness Study Areas for Wilderness designation, even when your own report states they possess "nationally significant unique combinations of ecological and supplemental values."

42 (138)

Specifically, addition of at least some of these study areas would add very unique ecologic and geographic areas to the nation's wilderness system, a balance to designated wilderness environments. While in some cases there are no recommended leasing or motorized use of some areas, the BLM

(2)

has not recommended wilderness status. Certainly the values inherent in these unique ecologies require more careful and critical appraisal and a less exclusive attitude toward designating wilderness protection.

I hope the BLM will take these comments, together with others, seriously in re-directing its focus to these valuable areas.

Yours sincerely,

Kinton L. Burns

2522 Dexter St.
Denver, Colorado 80207

43

Frenchy's Mountain
Post Office Box 486
Naturita, CO
81422

July 17, 1984

RECEIVED
Bureau of Land Management
JUL 20 1984
Durango, Colorado

Mr. David J. Miller
Area Manager
San Juan Resource Area
Bureau of Land Management
Federal Building, Room 102
701 Camino del Rio
Durango, Colorado
81301

RE: Draft San Juan/ San Miguel Resource Management Plan/ Environmental Impact Statement

Dear Mr. Miller,

As a Colorado outfitter of some 15 year's experience, my views and comments on your Draft Plan are focused towards the effects of the plan on that industry. More specificaly, they concern three areas addressed in the plan, those of recreation permitting, the wild horse program, and your volunteer service program.

Let me say at the onset that I agree in principal with the recreation permitting system; my concerns lie only with the administration of the program. I believe this program can be an asset to both the Bureau and the outfitters. For the Bureau the program provides both a way to control recreation use on the lands they are responsible for and the revenues to implement the plan.

For their part, outfitters are in a position to help the Bureau through intelligent and caring use of the Bureau's lands by helping the public to enjoy and appreciate their public lands and the assets of these lands such as the wild horse herds, archeological treasurers, and the wild flora and fauna. We believe such appreciation leads to public respect for our western heritage and protection of these resources.

We believe the concept of "multiple use" is a good and necessary foundation for Bureau management of these lands. This concept, however, makes necessary coordination and cooperation between the several fields involved with a mutual respect for each user concept.

We feel there is some danger that management personnel, constantly confronted with trying to balance these multiple uses, may favor one use over another. We feel there is a danger that this may be happening to recreation. The rules and regulations of the recreation programs can be applied in such an oppressive manner that the outfitter may feel that he cannot properly function and the assets to the public and the Bureau mentioned above could be ignored.

We think it would be unfortunate indeed if the outfitter, or some other recreation businessperson, were curtailed unnecessisarily in providing this valuable link between the goals of the B.L.M. and the recreation-oriented public. The role of the outfitter in encouraging the public's awareness and appreciation of its resources is, we believe, second only to that of the B.L.M.'s role in protecting these resources.

7/17/84 - BLM Page 2.

My comments on the wild horse program are with the understanding that the wild horse herd management tends to be a negative aspect of the Bureau's job; I know that the horses are difficult to manage at best and with insufficient funding the program can be a real headache for the Bureau.

We feel outfitters could be a real asset to the Bureau in helping to implement a plan somewhere between absolute conservation of the herds or their elimination. I have found that there is a great deal of interest among my guests in the wild horse herds. Whenever a group of clients rides with us on a trip to view these herds, my guests not only experience the "romance" of the herds but, I feel, gain valuable first-hand knowledge about the realities involved in wild herd horse management with the result that almost none's preconceived ideas stand up to this first-hand knowledge.

During the spring of 1983 we made two 'wild horse' trips accomodating 20 guests for a total of about 35 man days of recreation. To date during 1984 we have had four 'wild horse' trips accommodating 57 guests for a total of 75 man days of recreation.

Some of these trips have been one-day trips for which we trailer the riding stock to a starting point somewhere near the wild horse range. On the longer overnight trips we ride out with our clients from the Dry Creek Basin Store to Horse Park and camp on Redd Ranches property the first night. The second day we ride through Wild Cat Canyon into Spring Creek Basin looking for the wild horse herd and then camp at Greager Reservoir on the Klondike. The third day we circle back to the store. Camp gear and non-riders travel on a wagon pulled by a mule team. We have been happily surprised by the interest in these 'wild horse' rides and plan to expand them for the 1985 season.

Therefore we hope that the Bureau will see the wild horse program not just as a negative management problem but, with the help of outfitters like Frenchy's Mountain, an opportunity as I described above to help the public be made aware and more appreciative of, the dynamics of wild horse herd management, and, just as importantly, at no increase in budget cost to the Bureau.

Therefore I would like to ask the Bureau to consider a volunteer program using the staff of our organization to help implement the goals of the Bureau. I will be the first to admit that I am not an expert on wild horse management. However, I and my staff do spend a lot of man hours in the field and we do have some first-hand knowledge, especially of the Spring Creek herd. I agree that your proposed herd size of about 50 animals seems workable. However, I cannot agree that the elimination of the Naturita Ridge herd would be advisable at this time. I think, to repeat myself, that the existence of the Naturita Ridge herd, if made available to the recreation public, would better serve the goals of the Bureau than the increase in livestock forage that might be brought about by the herd's removal. 43 (6)

Frenchy's Mountain, with a professional staff that includes a Ph.D. in biology, professional stockmen, licensed guides, staff taxidermist, can offer a wide range of expertise both to the public and the Bureau.

We are offering this expertise to the Bureau on a volunteer basis. For example we know that the Spring Creek Basin is broken by so many water courses and canyons that the terrain is extremely difficult to travel, increasing management expense to the Bureau. I understand the management cost per animal is less when a herd is at 100 head or more. Further, I understand that these figures were arrived at from managing wild horse herds in Nevada. A study of our area might show that a smaller herd could be kept in control by baiting with alfalfa and trapping the animals in small groups. We feel that if this method could be developed it could reduce dra- 43 (6)

7/17/84 - BLM Page 3.

43 (6) matically the cost to the Bureau for wild horse capture - at least since most of the labor cost would be borne by volunteer help.

Another possibility is that Frenchy's Mountain would donate volunteer help to expand a fecal sampling program for both livestcok and wildlife to determine internal parasite content as another tool for herd management. Observation of mountain lion predation on the Naturita Ridge Herd could slso be an interesting and valuable management tool.

In summation: the public must be and to some degree already is eduacted about the assets found on Bureau managed lands. Because of budget constrints the BLM has a difficult time financing optimal management plans. Frenchy's Mountain, as well as, I'm sure, other outfitters, are anxious to work with the BLM, on a volunteer basis, in range mangement programs, specifically in this case, the two wild horse herds in our area. The wild horse herds provide an excellent opportunity to educate the public about their responsibilities in the use of public lands.

I hope we can work out a program that will mutually benefit Frenchy's Mountain, the BLM and the public - what better definition of "multiple use". Please let me know your feelings on these issues.

Sincerely,

William N. Koon

William N. Koon
Frenchy's Mountain

CAPITOL HEIGHTS PRESBYTERIAN CHURCH

44

DENVER COLORADO 80206

[illegible] FILLMORE STREET

303/333-9366 303/333-4306

MARK MEEKS

RECEIVED
Bureau of Land Management
JUL 20 1984
Durango, Colorado

Dear BLM,

I am writing to encourage a wilderness designation for the eight Wilderness Study Areas reported on the San Juan / San Miguel Resource Management Plan. I applaud the wilderness recommendation for the Dolores River Canyon, but I urge the same for all the other WSAs. There are worthy of protection as indicated in your plan's proposals, including the limitations on mineral leasing, recommendations for cultural preservation, and others. Yet, I am convinced a wilderness designation is the best way to afford protections these areas warrant; they are unique, wild, with many wildlife resources, and high scenic values & cannot understand the lack of a wilderness designation for all, and I urge you towards such action.

44 (138)

Thank you.

Sincerely,
Mark Meeks

45

STATE OF CALIFORNIA—THE RESOURCES AGENCY — GEORGE DEUKMEJIAN, Governor

COLORADO RIVER BOARD OF CALIFORNIA
107 SOUTH BROADWAY, ROOM 8103
LOS ANGELES, CALIFORNIA 90012
(213) 620-4480

July 20, 1984

RECEIVED
Bureau of Land Management
JUL 23 1984
Durango, Colorado

Mr. Paul W. Arrasmith
District Manager
San Juan Resource Area
Bureau of Land Management
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Arrasmith:

We have reviwed the draft report "San Juan/San Miguel Resource Management Plan - Wilderness Technical Supplement", April 1984, and are concerned about the impact of the Dolores River Canyon Wilderness Study Area (WSA) on the Paradox Valley Salinity Control Unit currently under construction by the Bureau of Reclamation.

The Paradox Valley Unit is one of the most cost-effective salinity control measures in the Colorado River Basin. Deep well injection of the collected brines is the primary means of salt disposal. Alternative injection well sites are being considered by the Bureau of Reclamation. It is our understanding that a few of the alternative sites are close to the boundary of the Dolores River Canyon WSA. Depending on final selection of the well site, there may be a conflict with WSA management criteria with respect to the well site and/or access to the site. Therefore, we request that the Bureau of Land Management obtain an administrative resolution with the Bureau of Reclamation of the potential conflict of objectives before recommendations on the Dolores River Canyon WSA are made to Congress. This would enable Reclamation to site and service the proposed injection well at the optimum location.

45 (141)

We appreciate the opportunity to review the draft report.

Sincerely yours,

Vernon E. Valantine

Vernon E. Valantine
Chief Engineer

cc: Forum Members

46

RECEIVED
Bureau of Land Management
JUL 23 1984
Durango, Colorado

19 July 84

Dear Mr. Miller,

As a descendant of Colorado's fourth Governor, I ask you to carefully consider what "Colorado" has always symbolized — God's Country.

I don't wish to see this beauty debased especially in the National Forests and Wilderness Areas. The more

land we preserve, the greater will be our historic significance. Economically it is the simple principle of 'supply and demand.' The men with foresight are those with a special knowledge of humanity. Please help me give my children a heritage they have a right to experience.

3.

Thank you,

Diana Ivers
Coyotes Revenge
10 11 C.R. 525
Bayfield, Co
81122

47

David J. Miller
San Juan Resource Area

RECEIVED
Bureau of Land Management
JUL 23 1984
Durango, Colorado

7-19-84

Dear Sir:

The following are my comments about the DRMP for the San Juan/San Miguel areas.

Having spent a bit of time studying the plan and time in some of the areas under consideration, I must state that I can't understand the position the BLM has taken. I feel that the value of the WSA's as wilderness far outweigh the value of the land for mineral and grazing. The diverse & varied flora & fauna in these areas makes them not only a refuge for the wild animals, but also the human in need of escape from the developments of civilization. **47 (138)**

Considering the nature of human progress, if these areas remain relatively undeveloped after over 100 years of white men in the area, I can only conclude that the need to develop these areas is not really very great. These areas are really only a small part of the whole & there are many much more desirable areas for development that can & should be developed first. Lets leave a small part of the country in the raw for future generations. If the need to develop the wilderness is great in say 100 years from now lets at least give the people living then the option of making that decision.

To me the help-limited measures of protecting these areas recommended by the BLM are not enough. I feel the areas deserve the full protection of the wilderness act. The boundries should be adjusted in order to give maximum protection rather than greater use of resources. I am sorry that these areas are not larger & that there are not more of them. I certainly advocate saving all of these areas we can. I am greatful for the segment of the Dolores River the BLM is recommending for wilderness. The Dolores is one of the most beautiful & interesting rivers I am familiar with & I would like to see the entire river protected as much as can be done considing existing developments.

If for no other reasons these areas should remain in the raw as a control, or comparison of the management of nature and the BLM.

I realize that everyone is not for wilderness nore is wilderness for everyone. There are also lots of recreational values in multiple use areas & some of these might be developed for various uses. Most nature lovers would like to leave the management of at least some area to nature. I believe the need & appreciation of wilderness will increase in future generations and it is much better to save what we have now that try to recreate it in the future.

Charles B. Shepard
Rt 2 Box 98C
Mancos, Co 81328

48

RECEIVED
Bureau of Land Management
JUL 24 1984
Durango, Colorado

July 15, 1984

To Bureau of Land Management
my husband and my self as individuals strongly oppose this Wilderness designation we feel theres enough accommodations for cultural, wildlife and recreation values. If development is stoped on gas, oil, Mining and livestock grazing
how are these recreation type people going to have fuell to get to there wilderness to clutter and nasty up the beautyfull areas ?
and how is our nation going to feed its people most folks eat Bef.
Theres so many laws and regulations now that it takes to much of our goverment money to inforse them all!
these Environmental people need to work more and they wouldnt have so much time to try to get all the land turned into recreation areas.
we oppose designation of Dolores River Canyon plus the other areas the B.L.M. keep Commenting on

Thank you
Concerned J P Johnson
Majine Johnson

BOX 1094
Cahone Colo
81320

49

July 23, 1984

RECEIVED
Bureau of Land Management
JUL 24 1984
Durango, Colorado

U. S. Department of the Interior
Bureau of Land Management
San Juan Resources Area
701 Camino Del Rio
Durango Colo 81301

Dear Miller:

I have been chosen by the Southwest Cowbell Association to write a letter of protest to the findings of the E I S. on the San Juan/San Miguel resources Management Plan. This represents 87 members of the Organization.

49-1 (104) We oppose any more Wilderness.

We ~~oppose~~ any reductions in AUM's that are listed in the E. I. S. until the 5 year study has been completed. The judgement of 1 or 2 grazing professionals in one summer is not adequate. We feel that page 3-92 should be deleted also all of Table 9-8 - Carrying Capacity and management Status by Allotment should be eliminated from the final draft and any other pages that reflect on the reduction of AUM's.

49-2 (105)

I hope you realize this will affect 176 family's livlihood - not to mention the chain reaction of other businesses in the community and the whole State.

Legislative Chairman
Southwest Cowbellers -
/Helen Buckles

{12551 HWY 666
Cortez - Colo. 81321}

50

colorado open space council
2239 E. Colfax Ave., Denver, CO 80206 393-0466

Western Colorado Office
P.O. Box 204
Grand Junction, CO 81502
(303) 245-1191

July 24, 1984

Mr. Dave Miller
Area Manager
San Juan RA, Bureau of Land Management
Room 102, Federal Building
701 Camino del Rio
Durango, CO 81301

Dear Mr. Miller:

We appreciate this opportunity to comment on the San Juan/San Miguel RMP/EIS and Wilderness Technical Supplement. Our comments are confined largely to wilderness, grazing, coal, recreation and lands.

BLM's analysis and conclusions with respect to the wilderness resources in the RMP/EIS are entirely inadequate. There is little semblance of balance in the Preferred Alternative between wilderness and nonwilderness lands allocations. The RMP/EIS makes a mockery of public input and considerations of ecological diversity within the National Wilderness Preservation System.

The grazing analysis is disappointing in that it fails in its stated purpose of providing information for comparison of various alternatives because of the minimal coverage given to the No Grazing alternative. We are also disappointed that impelmentation of the RMP will still leave huge amounts of the resource area in poor range condition.

The RMP/EIS makes many positive recommendations with respect to coal and recreation. We have suggestions for further improvements there.

The most important aspect of the plan will be monitoring and implementation. We hope BLM recognizes the seriousness of actually implementing its management plans and will provide adequate funding for the task. The elimination of the wilderness resource specialist in the Montrose District is a less than auspicious start. Who will be managing BLM's recommended wilderness after it is designated?

Sincerely,

Mark Pearson
COSC West Slope Representative

RECEIVED
Bureau of Land Management
JUL 25 1984
Durango, Colorado

"Humanity belongs to earth, not earth to humanity"

colorado open space council
2239 E. Colfax Ave., Denver, CO 80206 393-0466

COMMENTS OF COLORADO OPEN SPACE COUNCIL

ON

SAN JUAN/SAN MIGUEL RMP/EIS AND WILDERNESS TECHNICAL SUPPLEMENT

JULY 24, 1984

RECEIVED
Bureau of Land Management
JUL 25 1984
Durango, Colorado

"Humanity belongs to earth, not earth to humanity"

I. WILDERNESS

The wilderness recommendations of the San Juan/San Miguel RMP/EIS are, to say the least, entirely inadequate. BLM has simply done a whitewash of the wilderness review, ignoring facts, policy, and common sense in reaching its conclusions. The wilderness studies, as presently done, carry no credibility.

BLM has given little serious consideration to several aspects of its own Wilderness Study Policy and Planning Regulations - particularly in the areas of diversity and public comment; BLM has displayed an alarming ignorance of its previous findings in the Wilderness Inventory; BLM conclusions and recommendations bear little relation to the analysis in the EIS, with no reasons being provided in many instances; BLM has failed to consider reasonable alternatives for several of the WSAs; and BLM has placed a great emphasis on temporary administrative protections at the expense of permanent protections.

The Colorado Open Space Council supports all eight WSAs, with boundary adjustments in places, for wilderness designation.

A. Insufficient Considerations of BLM Regulations and Policy

50-1 (147)

BLM has largely ignored the contribution of diversity of the WSAs in its recommendations. The uniqueness and national significance of the WSAs is repeatedly noted throughout both the EIS and Wilderness Technical Supplement (WTS), yet apparently BLM feels no obligation to further the cause of diversity within the National Wilderness Preservation System by recommending these areas for wilderness.

For example, the EIS states (3-27) that "there is no potential wilderness within the Colorado Plateau Province which includes the same combination of ecological and supplemental values" as are found in Cross, Cahone, and Squaw/Papoose WSAs. Similarly, "the supplemental values of McKenna Peak WSA ..., in combination with its ecological community, would present a different and unique addition to the wilderness system." (EIS at 3-28) The EIS states as clearly as it can be stated (3-27) that wilderness designation of four WSAs (Cross Canyon, Dolores River Canyon, McKenna Peak, and Weber Mountain) "would add greatly to the diversity of the NWPS. Their contribution as wilderness resources are of local, regional, and national significance." It is most appalling that after such explicit praise concerning national significance in terms of uniqueness and diversity, these WSAs (and the other four as well) are not recommended for wilderness, despite the frequently minor or nonexistent resource conflicts. Clearly, the diversity component of the Wilderness Study Policy has been considered in name only and not in any substance by the decision makers.

Another factor of the diversity component has similarly been neglected, that of geographic distribution of wilderness areas. For example, there is no designated wilderness on the Uncompahgre Plateau. One of the very few potential sites for wilderness designation

50-1 (147)

there is Tabeguache Creek WSA. Unfortunately, BLM once again recommends against wilderness in the face of overwhelming compelling reasons for wilderness in a case with no resource conflicts.

BLM has not complied with either the public participation or consistency requirements of its planning regulations (43 CFR 1610.2 and 1610.3-2).

The public has not been provided meaningful opportunities to participate in and comment on the preparation of the plan (as per 43 CFR 1610.2) in that public input has repeatedly and consistently been ignored by BLM in preparation of the plan. BLM has on numerous occasions verbally stated that public sentiment in southwest Colorado is opposed to wilderness. The facts do not bear this out. Of the written comments concerning RMP alternatives that BLM recieved after its open houses in September, 1983, 9 individuals indicated support for wilderness while only one indicated halfhearted opposition to wilderness. At the recent public hearings this fact was again demonstrated with overwhelming support for wilderness in Durango (22 to 1), in Cortez (6 to 1), and even in Nucla (9 to 7), not to mention in Denver, where support was unanimous. When does BLM intend to seriously consider this preference by the public for wilderness?

50-2 (7)

The major opposition to wilderness has come from local county governments. However, the Colorado Department of Natural Resources favors wilderness for a number of areas beyond the one currently recommended by BLM. We would remind BLM that according to BLM planning regulations (43 CFR 1610.3-2(d)):

"Where State and local government policies, plans and programs differ, those of the higher authority will normally be followed."

How does BLM reconcile giving greater weight to counties that to the state of Colorado with this explicit instruction?

B. Ignorance by San Juan RA of the BLM Wilderness Inventory

50-3 (146)

BLM managers have repeatedly stated that the reason for not recommending two areas, McKenna Peak and Tabeguache Creek, is that they "just don't qualify for wilderness" (see transciprt of June 25, 1984 hearing in Durango for comments by RMP Team Leader Bruce Flinn). This is an alarming display of ignorance of the previous BLM decisions in the Wilderness Inventory.

We would remind BLM that the Colorado State Director's decision of November, 1980 identifying wilderness study areas, including McKenna Peak and Tabeguache Creek, plainly stated that both contain outstanding opportunities for solitude, outstanding opportunities for primitive and unconfined recreation, are natural in character, and are of sufficient

50-3 (146)

size (greater than 5,000 acres) to be designated wilderness. In short, they meet all of the criteria of Section 2(c) of the Wilderness Act as well as possessing additional supplemental wilderness values. The Wilderness Technical Supplement of the current San Jaun RMP (2-25 and 2-40) reaffirms these findings.

The RMP/EIS and Wilderness Technical Supplement also describe the high quality of wilderness values present in both WSAs, something obvious to anyone who has actually been in the areas. For example, McKenna Peak contains outstanding scenery, wildhorses, numerous fossils, and represents a unique ecosystem as well as providing winter wildlife habitat. Similarly, Tabeguache Creek contains spectacular massive sandstone cliffs, inviting plunge pools and a perennial stream through a desert environment in addition to numerous cultural sites. There is no doubt that these are high quality, desirable wilderness candidate areas.

For BLM to make ridiculous statements such as McKenna Peak and Tabeguchae Creek "just don't qualify as wilderness" in the face of years of documented evidence to the contrary defies belief. At best, such statements display a dismal lack of understanding of and lack of respect for Congressionally mandated Bureau programs. At worst, they indicate an inexcusable biased attitude concerning one of BLM's multiple-use programs, i.e., wilderness.

C. Secretive and Unfounded Rationales for Recommendations

50-5 (138)

BLM's conclusory recommendations often make no sense in light of its foregoing analysis and description of wilderness and non-wilderness resources in both the RMP/EIS and Wilderness Technical Supplement. Tabeguache Creek and McKenna Peak WSAs again provide good examples of this point.

The WTS notes that both areas are manageable as wilderness under all alternatives except for the No Wilderness alternative (1-19). Appendix Three-B of the WTS elaborates in great detail upon the outstanding uniqueness of McKenna Peak with respect to ecosystem types and special features. The WTS also describes the uniqueness of Tabeguache Creek as one of only a few pristine canyons along the Uncompahgre Plateau (2-40). Mineral potential is low to moderate for each area. The only substantial resource conflict is that of watershed development in McKenna Peak, a conflict easily resolvable through relocation of the watershed structures or the wilderness boundary. Of course, both areas have outstanding wilderness characteristics as previously mentioned.

Despite this overwhelming evidence in favor of a suitable wilderness recommendation - the areas are manageable, unique, outstanding, and have few resource conflicts - BLM's recommendation is nonsuitable!

50-4 (50)

There are similar problems in the inferred rationale behind the nonrecommendations of Weber and Menefee Mountains. These two areas are also considered to possess special qualities with respect to diversity (WTS, Appendix Three-B) in addition to their outstanding wilderness characteristics. The WTS claims that the areas are unmanageable as wilderness due to pre-FLPMA oil and gas leases. BLM fails to consider the great possibility that these pre-FLPMA leases will expire without any exploration efforts ever occuring (as is the case with 90% of the leases on federal lands). BLM will look rather silly when the primary reason for a nonsuitable recommendation (unmanageability) evaporates with the expiration of most of these pre-FLPMA leases. In fact, half of the pre-FLPMA lease acreage (lease C-20017) in Menefee Mountain WSA has expired since the publication of this RMP. The vast majority of lease acreage in Weber Mountain WSA is similarly due to expire in the next two years.

50-9 (52)

We question the oil and gas potential assigned to WSAs by the RMP/EIS. The stated potentials in the WTS from GEM Reports of May, 1983 are often at odds with the stated potentials of Geological Survey Circular 902-A-P, "Petroleum Resource Assessments of the Wilderness Lands in the Western United States," released in October, 1983. Specifically, the WTS (2-4) claims high potential in Dolores River Canyon, Menefee Mountain, and Weber Mountain WSAs whereas GS Circular 902-A-P concludes that these areas have medium potential. Also, the WTS (2-4) claims moderate potential in Tabeguache Creek while the GS Circular concludes that it has only low potential. With such wide variance in oil and gas potential estimates by differing experts, there is little justification to find areas nonsuitable on this basis.

50-4 (50)

The WTS should include maps detailing the locations of pre-FLPMA leases in WSAs so reviewers can see exactly where the leases are located and if in fact they do present a problem with wilderness manageability of the areas. BLM should also include a list of the pre-FLPMA leases, including expiration dates, so that the validity of arguments against wilderness because of unmanageability due to these leases can be verified.

With respect to Tabeguache Creek WSA, verbal statements have been made by BLM managers that this area is not recommended suitable because in the 1980 Colorado National Forest Wilderness Act Congress decided not to designate as wilderness the adjacent USFS Tabeguache Creek RARE II area. If this is in fact BLM's justification for its nonsuitable recommendation, then BLM is in direct contradiction to the stated desires of Congress. Senate Report 96-914, the Senate Energy Committee Report accompanying H.R. 5487, specifically addresses BLM's Tabeguache Creek WSA. On page 23, the report states:

"As required by the Federal Land Policy and Management Act, the Bureau of Land Management is now reviewing for possible wilderness

designation roadless lands adjacent to Kannah Creek, Roubideau, and Tabeguache. The Committee's decision not to designate these national forest lands as wilderness does not indicate any decision with respect to adjacent BLM lands, which should continue to be reviewed under the appropriate laws and regulations."

The WTS and RMP/EIS never give any reason for their recommendation. However, the above instruction from the Senate Energy Committee should dispell any notions BLM has of using 1980 wilderness legislation as a reason for dismissing Tabeguache Creek.

50-5 (138) In general, the public review of the RMP/EIS and WTS would be much better served if BLM would clearly state its reasons for its wilderness recommendations. We request that BLM do this in its final RMP and EIS.

D. Failure to Address Additional Reasonable Alternatives

We suggest several alternatives for further evaluation that were not given due consideration by BLM in the RMP/EIS.

50-6 (8) With respect to McKenna Peak, the major conflict appears to be watershed improvement projects to reduce salinity in Disappointment Creek. Why are no alternatives considered that would include salinity control structures on Disappointment Creek below the confluence with Warden Draw and Alkali Draw, largely outside of the WSA, and thus allowing for both watershed improvement and wilderness designation, rather than only inside the WSA?

50-7 (51) With respect to Cross, Cahone, and Squaw/Papoose Canyons WSAs, the major conflict is the existence of pre-FLPMA leases. BLM should consider an alternative of pursuing exchanges for these pre-FLPMA leases. Such an exchange alternative has recently been successfully completed involving coal leases in the Bisti Badlands WSA of northwest New Mexico. This is evidence that such an alternative is feasible and workable, if BLM so desired.

E. Inadequacy of Administrative Protections

BLM is proposing administrative protections for many of the WSAs that are short of wilderness protection. These are inadequate for several reasons.

The Wilderness Act begins with a statement that "In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization" does not lead to the absence of "lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness." BLM's practice of preferring administrative protections to permanent wilderness protection neither

assures nor secures an enduring resource of wilderness for future generations.

BLM's proposed administrative protections, such as designating Tabeguache Creek WSA as an Outstanding Natural Area, or proposing Weber and Menefee Mountains as semiprimitive recreation areas are simply not enduring. They will last only until the next revision of BLM's land use plans. When current BLM managers move on, there is no assurance that subsequent managers will continue to preserve the areas in their present natural condition. Actions taken in this RMP/EIS are proof positive of this fact. The McElmo (Rare Lizard and Snake) Research Natural Area was established in the 1960's. BLM's current managers disagree with that designation, and are loosening the restrictions accompanying it by downgrading the area from no leasing to no surface occupancy leasing. The public can only conclude that future BLM managers may similarly disregard decisions being made now in the RMP.

In short, the only way BLM can live up to the intent of the Wilderness Act is to recommend for enduring, permanent wilderness protection those areas now being proposed for administrative designations.

AREA SPECIFIC COMMENTS

Dolores River Canyon:

We wholeheartedly concur with BLM's recommendation of Dolores River Canyon as suitable for wilderness. The area is without a doubt one of the most spectacluar in Colorado, and, in fact, within the entire Colorado Plateau province. The Dolores River and its many diverse tributary canyons offer unmatched opportunities for solitude and recreation.

50-8 (139, 148) The wilderness recommendation should be expanded from its current 28,366 acres to 35,000 acres. Additions should include:

(1) An additional 900 acres in upper Coyote Wash, taking the boundary to the Utah state line. The supposed "road" in this area is severely eroded and almost undefinable on the ground.

(2) 1700 acres above the canyon rim on Skein Mesa should be included within the proposed wilderness as they are largely free of human imprints and would add much needed mesa tops to the area, thereby increasing its diversity.

(3) 1800 acres on Nyswonger Mesa should be included within the proposed wilderness along with that portion of the WSA next to Bedrock excluded by BLM. This again would significantly enhance the proposed wilderness by adding a mesa top to complement the canyons. The many ways on Nyswonger Mesa are largely overgrown and unnoticeable from ground level.

50-8 (139) (4) Roughly 2200 acres above Wild Steer Canyon on Davis Mesa should be added to the proposed wilderness. There are few significant impacts on the mesa, and its inclusion would once more add to the diversity of the area.

These additions are shown on an accompanying map.

50-9 (52) As mentioned previously, GS Circular 902-A-P describes the oil and gas potential of Dolores River Canyon WSA as medium. The RMP/EIS should be revised to reflect this.

We encourage BLM to acquire public easements or lands at Bedrock to provide for public access and for better wilderness management, as described in the preferred alternative (WTS at 1-9).

Cross, Cahone, and Squaw/Papoose Canyons:

These three WSAs are unique in many respects, not the least of which is because of their presently unrepresented ecosystems which are described in the WTS (Appendix Three-B). We support the wilderness manageability alternatives for each area.

There are additional unique values associated with these areas. As noted in the WTS, the areas are the last undeveloped remnants in an area which has been converted on a large scale to agriculture and mineral development. Just as importantly, the areas serve as an example of the prevailing environment when the Anasazi inhabited the area, preserving the numerous cultural sites in a natural environment.

50-10 (9) One area that is underemphasized by BLM in the RMP/EIS and WTS is the great correlation between increased road access (such as that accompanying mineral development) and increased vandalism of cultural sites. This is well documented by several studies prepared for BLM, including "A Survey of Vandalism to Archeological Resources in Southwest Colorado" by Nickens, et. al., No. 11 of BLM's Cultural Resource Series. Neither this nor any other applicable reference concerning vandalism of cultural sites is cited in the RMP/EIS. We suggest BLM evaluate the consequences of increased development. Such analysis will undoubtedly indicate the desirability of wilderness designation from a standpoint of cultural site protection.

Another feature of the canyons given inadequate consideration is the physical separation of the canyon bottoms from the rims. The major reason the canyons continue to be roadless is because of the barrier the rims represent. Thus, even though on a map the areas appear to be in the midst of development, in reality they are isolated from the sights and sounds of nearby development.

There is a statement concerning uranium potential in Cross and Squaw/Papoose Canyons WSAs that needs substantiation. The WTS (1-19) claims that there is "a probability" the WSAs contain pre-FLPMA mining

50-11 (53) claims with valid discoveries. Either they are valid or they are not. If BLM intends to use this as a reason for nonwilderness, then it had better find out the exact validity of such claims. We request BLM to conduct a validity determination of the claims in Cross and Squaw/Papoose Canyons WSAs.

50-12 (148) We must take issue with a statement concerning Cahone Canyon WSA that is patently false. The WTS (2-9) states that some nonimpairing uranium exploration was conducted in the area in 1980 by Phillips Uranium. It was hardly nonimpairing exploration activity; the road built by Phillips effectively severed Cross Canyon WSA from Cahone Canyon WSA. But for this blatantly illegal and imparing road construction, the two WSAs would be one. However, since BLM is now claiming that this road is nonimpairing, then we request BLM to redefine the two WSAs as one whole WSA.

The no leasing restrictions contained in the plan for these areas are commendable, but really rather toothless as BLM long ago decided the fate of the areas by originally leasing the WSAs. While the leases undeniably represent a management problem, BLM should simply report to Congress that the areas are of great importance in terms of wilderness, and that BLM erred in originally leasing the areas. BLM should further report that exchanges be pursued for leases in the WSAs.

McKenna Peak:

McKenna Peak is undeniably one of the most unique areas in Colorado, both in terms of the ecosystem it represents and in the variety of experiences available in the area.

Appendix Three-B of the WTS adequately describes the ecological uniqueness of the area in the transition zone between Colorado Plateau and Rocky Mountain Forest. One major aspect of the area that has been overlooked is the seeming abruptness of this transition. A hiker can climb one of the barren Mancos Shale buttes of the area (such as the one west of Warden Draw) and upon reaching the summit, the hiker finds a veritable forest of douglas firs hiding on the north slope of the butte. From a vantage point within the confines of this cool, fragrant refuge one looks out into the shimmering heat of the adobe badlands. This experience is unique to McKenna Peak

The preferred alternative of the WTS (1-11) is ludicrous in some respects. We find it incredible that BLM intends to increase and intensify livestock grazing on the saline, barren slopes of Mancos Shale in the area. As mentioned previously, the proposed salinity control projects could conceivably be placed downstream, outside of the WSA. Given the relative absence of mineral values in this area, it is extremely unfortunate that a wonderfully unique and diverse wilderness resource is being relegated to marginal grazing activities. We request BLM to clearly state its reasons opposing wilderness for McKenna Peak.

Tabeguache Creek:

The many reasons why Tabeguache Creek should be recommended for wilderness designation have been mentioned previously. We would also remind BLM of the Senate Energy Committee's language concerning Tabeguache Creek in 1980.

Additional reasons to recommend Tabeguache Creek for wilderness include the potential it has to diversify the economy of western Montrose County, presently deep in the doldrums from its past reliance on a single source economy - mining. Wilderness designation of Tabeguache Creek could conceivably draw additional visitors to the west end of the country, bolstering the tourist business.

Identification of the canyon bottom as an Outstanding Natural Area (ONA) is a positive step and shows that BLM recognizes the wilderness values that are present. BLM needs to complete that thought process and recommend the area for wilderness.

Weber and Menefee Mountains:

Both of these areas offer BLM the opportunity to significantly increase the diversity of the NWPS. BLM intends to place them off-limits to leasing of all types, as well as managing them for wildlife and primitive recreation values. Again, this is a positive step toward protection, but complete and enduring protection will only be provided by wilderness designation. As previously mentioned, the pre-FLPMA leases in the areas are a poor reason for not recommending the areas as suitable for wilderness.

II. GRAZING

We are generally disappointed by the RMP/EIS's treatment of grazing. The range of alternatives is narrow in terms of improvements in range condition, and the No Grazing alternative was not analyzed in a useful fashion.

Currently, 39 percent of the planning area is in poor range condition. The alternatives would result in improvements such that variously 27-36 percent of the planning area would still be in poor range condition after 10 or 15 years of implementation of the plan.

50-13 (103) We see several problems with this approach. There should be an alternative that will significantly improve the range over the life of the plan. The best alternative, from a range point of view, still leaves over 1/4 million acres in poor condition at the end of 15 years. The major indicator in the alternatives appears to be the amount of money spent on range improvements, and not the condition of the range. We request development of an alternative that would significantly improve the range condition.

50-14 (106) Perhaps the No Grazing Subalternative would satisfy our request. However, the miniscule amount of information provided to the reviewer by the RMP/EIS makes any useful reading of the No Grazing alternative impossible. In conversations with BLM managers, it has been suggested that due to the prevailing soils and precipitation in the resource area, a significant fraction of the area may just naturally be in poor range condition, though this might equate to good ecological condition. Unfortunately, the paucity of information contained in the RMP/EIS with respect to the No Grazing alternative prevents any conclusion of this sort. One extremely helpful tool which might allow the reviewer to gauge the impact of grazing on the resource area would be to include a vegetation condition figure for the No Grazing alternative as was done for the other alternatives. This figure (Figures 3-1, 3-2, 3-4 in the RMP/EIS) displays expected long-term changes in vegetation condition for every alternative except the No Grazing alternative.

Because BLM has provided no analysis in form equivalent to that in the other alternatives of the expected impacts of the No Grazing alternative, BLM has subverted the original purpose for even mentioning the alternative. That purpose, stated in the RMP/EIS (3-22) is:

> "... to provide essential baseline information to compare against the environmental impacts of all alternatives which involve grazing and is needed to permit full and fair consideration of nonlivestock management options."

50-14 (106) BLM has not provided this essential baseline information in a useable fashion. The analysis of the impacts on vegetative condition from the No Grazing alternative amounts to five subjective sentences that do not allow for any reasonable comparisons to the other alternatives. This deficiency must be corrected.

50-15 (107) A major concern we have had in past years has been BLM's practice of chaining large amounts of very arid pinyon-juniper forest. The RMP/EIS is unclear as to the amount of new chainings, if any. According to BLM personnel in the resource area, no new chainings are anticipated in this plan, simply maintenance of existing chainings. Is this true?

50-16 (108) The RMP/EIS does not provide any specific information breaking down the allocations of forage between livestock and wildlife in each allotment. There are several areas of potential deer-elk competition, including Paradox Valley, Mail Box Park, Dry Creek Basin, and Disappointment Valley. When will these allocations be made, and when will the public have the opportunity to comment on them?

III. COAL

BLM has taken several positive steps in the RMP/EIS for which it is to be commended.

We applaud BLM's effort to consult surface owners in the planning area where the federal government holds the mineral estate. This is an absolutely critical step in the planning process. We are glad to see

it done at the RMP stage rather than at the tract delineation stage.

We support the RMP/EIS's designation of the East Cortez KRCRA as unavailable for future leasing. In addition to the area's important winter wildlife habitat, mining in the area would be in full view of Mesa Verde National Park and would significantly detract from visitor enjoyment of the park.

50-17 (54) We must object most strenuously to BLM's allocation of several tracts of land to future potential coal leasing. These are areas where we believe the resource values present are absolutely incompatible with coal mining. The tracts lie in R.5W, R.34N on the Piedra River immediately west of Chimney Rock. We find it incredible that BLM would consider leasing coal either on or underneath the Piedra River; the potential impacts on water quality must be severe. From an aesthetic, visual aspect, coal leasing in the Piedra Valley is an extremely inappropriate allocation of public resources, particularly considering the fact that BLM is making available 46,000 acres for coal leasing resource area wide. These 760 acres along the Piedra represent less than 2% of the future leasing area of the RMP. The value of the Piedra River valley intact must certainly outweigh this miniscule amount of potential leasing thay may be foregone. We request that BLM change the allocation for the tracts in Secs. 13,24,25,36, R.5W, T.34N and in Sec. 18, R.4W,T.34N from Ec (coal leasing) to Bdew (deer and elk winter range).

IV. RECREATION

We support the identification of the Dolores River SRMA. The Dolores River is a unique resource with high recreation scenic, and wildlife values. As such, it is extremely worthy of protection. Development of a management plan addressing carrying capacity, visitor use and preferences, and permits is a good start toward ensuring preservation of the natural values of the river corridor. Closing the river corridor to mineral leasing and ORV use is to be commended; however, it is also necessary to withdraw the corridor from mineral entry or else these other closures are rather pointless. The emphasis area prescription for Area C (recreation) as presented at BLM open houses in September, 1983 originally included such a mineral withdrawal. Why is it not still included as part of the area prescription? Nothing will destroy the river corridor's natural attributes faster than further uranium exploration, with its associated scars and pits, or placer mining operations in the river itself.

50-18 (129)

50-19 (133) The plan allocates much too much land to indiscriminate ORV use. The preferred alternative leaves 79% of the resource area "open" to ORV use. We believe this is sending the wrong message to the public, that BLM is in effect saying that you (the public) can go anywhere

50-19 (133) you want, we (BLM) don't care. A wiser course would be to limit ORV use to existing roads and trails throughout the resource area, which tells the public that it should really be sticking to existing tracks and not tearing up the countryside. Such a policy still gives some leeway for deviations from roads without sanctioning widespread abuse. Why is there no alternative that takes this tact? Every alternative is essentially the same, with from 79% to 82% of the resource area open. Where is the range of alternatives as required by NEPA?

V. LANDS

The RMP/EIS proposed to sell an inordinate amount of land. There needs to be much more the "He" prescription, which requires exchange of lands only, and not sale.

We question the idenfication for disposal of several specific tracts.

50-20 (10)

(1) Dolores River bottom land north of Uravan:
This tract (Sec. 11, R.18W, T.48N) is about 100 acres smack dab on the Dolores River. BLM should never dispose of public access to rivers or of publicly owned river bottom. Some of the worst environmental practices have occured along our western rivers. We should retain as much of them as is possible. Is this a portion of the canyon containing the historic flume as well? If so, that is yet another reason to retain public ownership. We request that the "H" prescription be replaced.

(2) Plateau Creek:
This 40 acre parcel (Sec. 35, R.15W, T.40N) contains a public water reserve. We strenuously oppose disposal of public water reserves, particularly in this instance where management difficulties could easily be overcome with a little fencing to redirect livestock.

(3) Parcels adjacent ot USFS land:
Priority for disposal of BLM parcels adjacent to USFS lands should be to transfer jurisdiction to USFS rather than sale to private owners. This will serve to block up lands for administration while at the same time reducing the disolution of the public domain.

Why are there no acquisitions included on the RMP map? There are several sites that, if acquired, would greatly enhance management and public use and enjoyment of the public domain. These include:

(1) Bedrock:
Roughly 400 acres south of Bedrock (Sec. 19,30,31, R. 18W, T.47N). Acquisition would facilitate access for boaters and would remove a finger into the proposed Dolores River Canyon wilderness.

50-20 (10)

(2) Bradfield Ranch:
Acquisition of the Bradfield Ranch (which is for sale) would facilitate access to the Dolores River for boaters. This tract is one of the few private parcels between Slickrock and McPhee Dam, so acquisition would add significantly to blocking up public lands.

(3) Bridge Canyon:
Acquisition of 120 acres (Sec. 27, R.20W, T.36N) in the bottom of Bridge Canyon would serve to improve public access and to place important riparian habitat and the northernmost range of Sonoran reptiles under public ownership.

VI. SPECIAL MANAGEMENT AREAS

We are disappointed by the downgrading of the Rare Lizard and Sanke (McElmo) Research Natural Area (RNA) whereby it will now be available for no surface occupancy leasing while previously it was closed to leasing. This is an unfortunate example of the impermanence of BLM administrative protections, reinforcing the need for permanent protections such as wilderness.

50-21 (135) Why is McElmo RNA discussed under Recreation in the Preferred Alternative (RMP/EIS, 1-36)? It has nothing to do with recreation.

The proposed Anasazi Cultural Multiple Use Area ACEC is a worthy endeavor on BLM's part. We support the designation if it means development of a more detailed plan for management of the cultural resources in the area. Closure of new mineral exploration and development roads to public access is commendable, but we doubt BLM's ability to monitor such closures when it has little money to properly manage its current miriad responsibilities. ACEC designation is no substitute for wilderness designation. The best way to assure protection for a sizeable portion of cultural resources is to designate Cross Canyon, Cahone Canyon, and Squaw/Papoose Canyons WSAs as wilderness.

VII. CULTURAL

We support the development of Cultural Resource Management Plans for the areas identified in the Preferred Alternative. We also endorse the leasing stipulations placed on those areas, though it may be a pointless exercise if BLM has already leased everything.

One thing that would be very helpful would be if BLM put the different leasing restrictions (NSO, no leasing) on the RMP map so that the reader could see exactly where the restrictions are.

VIII. FORMAT

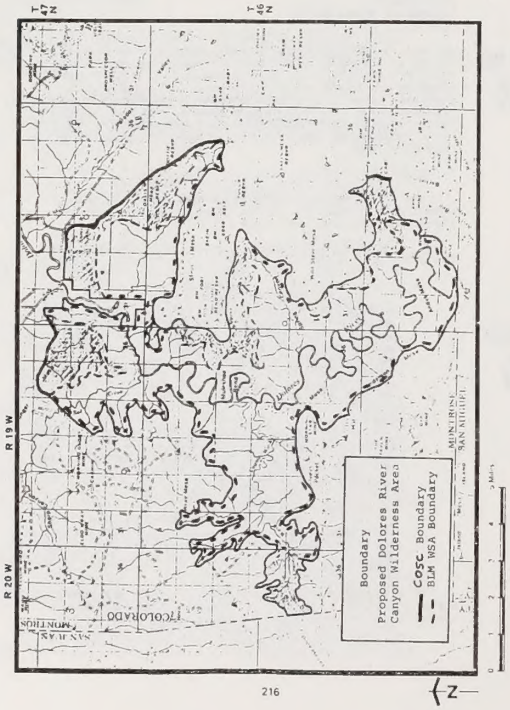
50-22 (11) Irrespective of the content, the San Juan/San Miguel RMP/EIS is the most unreadable of any RMP we have yet to review. There are several format improvements BLM could make to greatly enhance the readability of the RMP/EIS.

One would be to place headings on each page identifying the chapter, such as "Affected Environment," "Environmental Consequences," etc.

Another great help would be to place the appropriate alternatives as page headings. It is very confusing for the reader to open the document and to try to decipher which alternative is being discussed. Headings would help immeasureably. It is possible to do this, as the Billings RMP contained such headings.

Printing the resource titles in bold type would be a substantial help to the reader. The labels identifying resource categories tend to fade into the print rather that standing out. The practice of underlining subparagraph headings within resource categories without a compensating print for the main titles further confuses the eye.

50-23 (12) The maps have several omissions. For example, on the map of the Preferred Alternative, what is the management prescription for Paradox Valley. There is no apparent, applicable letter denoting the management for this area.



51

1800 Hatcher
Ann Arbor, Michigan 48103
July 21, 1984

RECEIVED
Bureau of Land Management
JUL 25 1984
Durango, Colorado

Dave J. Miller, Area Manager
San Juan Resource Area
Bureau of Land Management
Room 102, Federal Building
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller:

I would like to comment on the Draft San Juan/San Miguel Resource Management Plan and Environmental Impact Statement of April, 1984.

I strongly support the Resource Conservation Alternative (which I will refer to as RCA) as opposed to the present Preferred Alternative (which I will refer to as PA). I find the other alternatives, the Resource Utilization and the Present Management, totally unacceptable, and since they are not preferred by BLM I will not discuss them further here. These judgements are based on a number of factors, but the severe lack of wilderness protection in all but the RCA is the major reason for my concern.

The draft RMP/EIS notes numerous times that designation as wilderness for any of the eight wilderness study areas in the San Juan/San Miguel resource area would add to the diversity of the National Wilderness Preservation System. Designation of at least four of these (Cross Canyon, Dolores River Canyon, McKenna Peak and Weber Mountain), as noted on page 3-27, would "add greatly to the diversity of the NWPS". In addition the draft asserts that the contribution of these four WSA's would be of "local, regional, and national significance". Despite these considerations, the PA recommends designation of wilderness for only one wilderness study area, Dolores River Canyon, protecting wilderness values on only 28,630 acres. At the same time, the PA would designate the other seven WSA's totalling 73,971 acres as non-wilderness.

The impact of non-designation for these seven WSA's is well documented in the draft RMP/EIS, and there is no doubt that they would be permanently lost as wilderness. According to the draft document (page 3-65), non-designation "would have long-term, adverse impacts to the wilderness resource. Future mineral development and associated roads and facilities could significantly alter the natural landscape and opportunities in the region for solitude and primitive recreation. Nondesignation of the WSA's would be a national long-term loss of ecological systems and landforms that are not currently part of or may never be included in the NWPS". The draft, on page 3-66, notes that there is a "high probability" that the WSA's wilderness values will be lost due to "mineral, range, and salinity management". It goes on to describe these losses as "permanent", and "irreversable and irretrievable" (page 3-29).

The sacrifice of such scenic, ecological and recreational resources, though tragic, could theoretically be justified by other conflicting needs of overriding importance. However, the draft notes that wilderness designation of all eight WSA's under the RCA would have no significant negative effect on any of the areas of concern except energy and minerals. It should be noted, though, that in the case of energy and minerals the PA has essentially the same negative impacts as the RCA. "he only factor used to justify non-designation for the seven WSA's appears to be the potential manageability problems associated with the possible development of pre-FLPMA mineral, oil and gas leases within their boundaries.

Based on my understanding of the Wilderness Act, FLPMA's wilderness provisions and BLM Wilderness Policy, potential mineral, oil or gas development within a WSA is not a legitimate disqualifying factor in consideration of the area for wilderness designation, but manageability problems stemming from such development can be. However, such development is not now going on in the WSA's to any degree, and there is no certainty that the existing leases will ever be developed. Should they not be developed there will, of course, be no manageability problems associated with such development. Furthermore, even with lease development, the draft notes on page I-19 of the Wilderness Technical Supplement that the McKenna Peak and Tabeguache Creek, and to a lesser extent, the Weber Mountain and Menefee Mountain WSA's would be considered manageable under all alternatives except for the No Wilderness alternative. There is also the option of purchasing leases or private inholdings on which there is planned development that is incompatible with wilderness. Thus, using these potential manageability problems as a disqualifying factor for the seven WSA's is simply not justified in this situation. 51-1 (138)

The Resource Conservation Alternative, though noting potential manageability problems, would still designate all eight WSA's as wilderness. This is the most sensible approach to the issue.

There are however, a few areas of concern in which the RCA is inadequate. By classifying 80% of the area as open to ORV's there would great potential for significant damage to the public land resources. With 62% of the range vegetation presently in fair or poor condition, and with the great concentration of known and unknown cultural sites in the resource area, there is ample justification for severely limiting something as damaging yet unnecessary as ORV's in the area. A decrease in the area open to ORV's from the present 95% to 20-30% would certainly be appropriate. 51-2 (133)

There are also two aspects of the Preferred Alternative which, for no apparent reason, are not included in the RCA. The McElmo Rare Lizard and Snake Resource Natural Area should continue to be protected, but without the mineral withdrawa removed as in the PA. In addition, the Anasazi Cultural Multiple Use Area should be included to encompass the area proposed in the PA, excluding wilderness areas within its boundaries. 51-3 (95)

I strongly urge you to make the Resource Conservation Alternative, with the alterations noted above, the preferred alternative in the final RMP/EIS. The losses of wilderness resources and values that would accompany the Preferred Alternative and the other alternatives would be unjustified, unacceptable and indefensible. Adoption of the amended RCA would begin to allow improvement in present problem areas such as range, wildlife and cultural resource protection, as well as to protect eight nationally significant wilderness areas.

Thank you for the opportunity for comment.

Sincerely,

Michael J. Kellett

52

July 23, 1984

To: Area Manager
San Juan Resource Area, BLM
701 Camino del Rio
Durango, Colorado 81301

Re: Disposition of various Wilderness Study Areas and draft proposals for resources in the San Juan/San Miguel Resource Management Plan.

Please include this letter in the hearing record pertaining to the above.

I am writing this letter to object to the Bureau of Land Management recommendations for wilderness classification and to certain aspects of its draft proposals for resources in the San Juan/San Miguel Resource Management Plan.

I support a wilderness recommendation for the Delores River Canyon area, but object to the failure to recommend the other seven Wilderness Study Areas of the Resource Management Plan for wilderness designation.

52-1 (138) Why should these additional seven areas be denied wilderness protection, despite strong public opinion favoring such and despite BLM's admission that they contain "nationally significant unique combinations of ecological and supplemental values?"

In the case of the Weber Mountain and Menefee Mountain WSAs, "de facto" wilderness protection would be provided through BLM's proposal to prohibit mineral leasing and off-road vehicle use and to emphasize wildlife protection and semiprimitive recreation, yet the wilderness recommendation, giving permanent protection, has been withheld from these ecologically unique areas. Why?

Similarly, the Cross, Cahone, and Squaw/Papoose Canyons are to be given "de facto" wilderness protection through prohibitions on mineral leasing, etc., but not the permanent protection of wilderness designation needed for these areas of diverse wildlife habitat and extensive archeological resources. Why?

The ecosystem continuum from semi-arid desert through subalpine forests of the Tabeguache Creek WSA and the shale badlands, wildlife winter range, scenery, and wild horse herd of the McKenna Peak WSA all need permanent, wilderness protection.

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JUL 25 1984

Durango, Colorado

52-2 (103) As to other aspects of the Resource Management Plan, the proposal designating 156,000 acres west of Cortez as an Area of Critical Environmental Concern is laudable, but should not act as a substitute for designating Cross, Cahone, and Squaw/Papoose Canyons as wilderness. Also, the plan must include alternatives which would substantially improve the condition of public rangeland.

Sincerely,

Robert E. Schreiner, Jr.

Robert E. Schreiner, Jr.
1440 E. Quincy Ave.
Englewood, Colorado 80110

53

Chevron U.S.A. Inc.
700 South Colorado Blvd., P. O. Box 599, Denver, CO 80201

Richard T. Hughes
Staff Analyst
Legislative and Regulatory Affairs

July 24, 1984

Mr. Dave Miller
Bureau of Land Management
Room 102, Federal Building
701 Camnio del Rio
Durango, CO 81301

Dear Mr. Miller:

As an oil and gas producer, Chevron is interested in the approach BLM Resource Management Plans to take in considering the oil and gas resource. While there may be a number of ways to consider oil and gas in the planning process, we believe the most meaningful methods are those which first recognize the relative oil and gas potential and then consider that potential in making surface use decisions which might affect development of that potential.

The BLM Washington Office recently circulated to State Directors Program Specific Guidance for fluid mineral leasing input into RMPS (Information Bulletin 84-261 dated June 21, 1984). While we do not believe this is a perfect system, nor is any system likely to be perfect, this system does incorporate the concepts discussed above. Thus, we would encourage you to use this system in your final plan.

53 (55)

Sincerely,

RTH

RTH:md

RECEIVED
Bureau of Land Management
JUL 25 1984
Durango, Colorado

Central Region – Exploration, Land and Production

SUCKLA RANCHES 54

12551 Highway 666
Route 1 – Box 108-G

Cortez, Colorado 81321

Dave Miller
Bureau of Land Management
San Juan Resources Area
701 Camino Del Rio
Durango Colo. 81301

Dear Dave Miller:

54-1 (129)

I want to protest the Little Gypsum Valley boat launch and picnic area. My reasons being; It will block my access to grazing down river from the bridge. The months of April and May, during the peak time of rafting, I have to cross 700 mother cows and calves at the bridge. It is impossible to cross with any activity there and this is the only way I have of getting them across unless the river is dry. In talking with the San Miguel County Comm. the road from Gyp Gap to your proposed recreation area is not adequate for the amount of traffic that is projected. I have 135 acres of cropland adjacent to the road and a family living there and the traffic would cause a dust hazzard to crops and family.

You already have private facilities at Slick Rock which is only 8 miles up River from Little Gyp site and would be in direct competition to Private Enterprize.

In talking to the Bureau of Reclamation they are not guaranteeing over 70 feet of water and could be dropped to 20 feet minimum flow. Many of us feel that this is at least 3 years premature until you see how much water will be available.

54-2 (109)

As in my previous letter I am protesting the reduction in the AUM's - not just my own but all the permittees involved since I represent them as a grazing board member. I want to call your attention to No. 7043 - South Mt.. The study shows a reduction of 70%. I dont know when this could have been inspected when you have to cross 3 different land owners to get to this allotment and all 3 gates have been locked for the last 10 years.

Our Attourney wants to see the field notes.

Sincerely,

James Suckla

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Bureau of Land Management
JUL 25 1984
Durango, Colorado

55

A>

4434 West 31st Avenue

Denver, Co. 80212

Phone: 477-3254

July 23, 1984

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Bureau of Land Management
JUL 25 1984
Durango, Colorado

Area Manager
San Juan Resource Area, BLM
701 Camino del Rio
Durango, Co. 81301

To Whom It May Concern:

I have just read the San Juan/San Miguel Resource Management Plan and am, frankly, appalled by its recommendations.

I come originally from Southwestern Colorado and, in fact, consider myself to be living only temporarily away from that area that my family helped settle almost a century ago. Since I reside in what is now the most populous area of Colorado, I had fervantly hoped that the Bureau of Land Management would recognize the uniqueness and the flatout dollar value of potential wilderness in Southwest Colorado. I was mistaken.

I almost get the impression that from a political standpoint, BLM has decided to recommend as little land as possible for wilderness in the belief that it could then make minimal concessions and stiffle environmental critics while simultaneously retaining huge tracts of land for later mineral and timber development.

I strongly urge the Bureau of Land Management to bring its thinking into line with what is best for the San Juan/San Miguel areas one of the most unique areas in the nation- if not the world.

Over four million people a year visit Southwest Colorado because of its scenic grandeur, its unique cultural history, and its dynamic and unique geology. Those features need protection.

55-1 (138)

I urge that All of BLM's suggested Wilderness Study Areas instead be recommended for Wilderness. If there are worthy of recommendations against mineral development and motorized vehicles they are worthy of permanent wilderness status. Also because of the serious impact of development in Southwest Colorado on wildlife - to the point some wildlife officials tell me that much of today's wildlife may simply cease to be in a few more years - I strongly urge BLM to recommend Weber and McKenzie mountains, Tabernache Creek, McKenna Peaks, and areas immediately adjacent to Mesa Verde National Park for wilderness status. I feel that these areas are essential to the continued survival of much of Southwest Colorado's wildlife.

55-2 (110)

I am also determined to see that, even though over grazing has done major damage to public resources the BLM rather than planning remedial action, is actually considering alternatives that will make the problem more critical. I very much favor anything that will benefit agriculture in Southwest Colorado; however, I think BLM's approach will actually be detrimental to agriculture.

And God knows that it is ridiculous to sacrifice the long term good for short term expediency. That is exactly what BLM is proposing.

I similarly would hope that BLM would take strong, definitive action to protect cultural resources in an area where rapid population growth, energy developments, and vandalism have already taken a terrible toll on Anasazi cultural sites. The Anasazi culture is rapidly being recognized as one of the most unique and advanced cultures in world history. As with wilderness, Anasazi cultural sites should be preserved not only for their uniqueness and beauty, but because they represent a sound investment in Southwest Colorado's future; a future which people will increasingly be seeking out--and will be willing to pay for- that which is lost elsewhere.

Thank you for this opportunity to comment.

Sincerely,

Kathleene Parker

Kathleene Parker

56

Farmington, NM
July 24, 1984

Paul Armsmith
District Manager
U. S. Bureau of Land Management
Durango, Colorado

Dear Sir:

This is in reply to your request for public input concerning your recent RMP and EIS for the San Juan - San Miguel planning area.

I was pleased that your preferred alternative recommended only the one wilderness area in The Dolores Canyon, and rejected several others that were questionable. I believe that future Americans should inherit some lands that are especially remote and especially beautiful, but due to limited use, and other practicalilities, we should not go overboard in this area.

I would be pleased to see you consider in the future, more lands for disposal to the public as home sites. These would be lands that have little timber or grazing value, and that are 5 to 10 miles from towns, and near public roads, whether or not they are isolated pieces. People desperately want rural home-sites, and I do not believe there is enough private land of this type that is for sale. I also believe these lands would be more valuable on the tax rolls than in the public trust.

Over all, I was pleased with your report, and find little fault with it. It reflects a great deal of work on your part, and a good measure of horse sense.

Please consider this letter also a request for two pieces of land that are marked for disposal:

1. Eighty acres described as: E½ SE¼ - Sec. 18 - T40N - R17W. Approximately 7 miles Northeast of Cahone. This piece is bordered on the north and the west by my farm, and I would be interested in acquiring it, with a view to fencing it for native pasture.

2. An irregularly shaped piece of unknown acreage, located in: Sec. 11 - T40N - R. 18 W, approximately six miles Northwest of Urawan on the Dolores river. On this piece I would like to develope a small farm and homesite.

Sincerely,

RECEIVED
Bureau of Land Management
JUL 25 1984
Durango, Colorado

Frank M. Clark
4501 Hannon Dr.
Farmington, NM 87401

58

RECEIVED
Bureau of Land Management
JUL 26 1984
Durango, Colorado

P.O. Box 754
Moab, UT 84532

24 July 1984

Bureau of Land Management
San Juan Resource Area
Federal Building, Room 102
701 Camino del Rio
Durango, CO 81301

SUBJECT: Public Comment on Wilderness Suitability Recommendations

The San Juan- San Miguel Draft RMP/EIS does a thoroughly dishonest job on the wilderness resource. How anyone who has once read the Wilderness Act could come up with the recommendations in that document is inexplicable unless they were written to satisfy some hidden agenda.

The BLM claims it is protecting sensitive environmental values while refusing to recommend all of eight scattered WSA's for wilderness. Why a mere 100,000 acres or so of wilderness is too much to ask is a question the BLM fails to adequately answer.

To begin with the smallest error, even the 28,366 acre recommendation for the Dolores River Canyon is flawed. How can you justify the deletion of acreage based on mining claims? The Wilderness Act clearly allows claims within wilderness areas if patented before December 31, 1983. **58-1 (149)**

Cahone Canyon, Cross Canyon, Squaw/Papoose Canyon and Tabeguache Creek are all being recommended nonsuitable for wilderness and at the same time proposed as part of an ACEC. Why not wilderness for these areas? Certainly you cannot suggest that cultural resource management and wilderness are incompatible, because no reputable archaeologist will support you. In fact, a study by Nickens and Associates of this very area proved conclusively that the single greatest factor in protecting Anasazi sites was lack of road access.

Does the oil and gas resource outweigh wilderness? This is not the case apparently, as you are proposing no surface occupancy leases for ACEC areas. Some areas are even proposed for no leasing.

However, on page 1-47 the BLM admits that the preferred alternative allows "potential permanent losses of wilderness characteristics." Why permanent? Are you talking about uranium mining? Leases for oil and gas can be controlled with regard to surface impacts.

The BLM must agree with this last point, as you have allowed two oil wells to be drilled in Weber Mountain WSA and two more to be staked in Squaw/Papoose Canyon WSA. These areas are supposed to be subject to the Interim Management Policy which allows only temporary, non-impairing activities.

The question remains: why have seven wilderness study areas been recommended as nonsuitable for wilderness designation? BLM even admits, in the case of McKenna Peak and Tabeguache Creek, that resource conflicts are minimal.

Menefee Mountain is proposed for erosion and salinity control projects. How do these conflict with wilderness designation? They don't. These types of projects seldom make economic sense, however, and I doubt that the BLM seriously intends to carry them out.

On page 1-36 we find a table showing the management emphases the BLM prefers instead of wilderness. With the possible exception of minerals, none of these are in conflict with the Wilderness Act. Has anyone there read the Wilderness Act? Tell me how cultural resources, aquatic and riparian habitat, livestock grazing, recreation, wild horses, wildlife, soils or watershed management conflict with wilderness designation. I'm always open to new theories!

58-2 (138)

The BLM admits wilderness values are very high in all eight WSA's. They all get high marks for naturalness, solitude, outstanding recreation opportunities, archaeological and/or geological supplemental values, and contribution to diversity of ecosystems and landforms in the National Wilderness Preservation System. What's wrong with these areas?

The canyon areas, according to the BLM, serve "as a natural refuge for native flora and fauna that have been displaced from surrounding areas by agriculture and other human activity." That is the highest purpose of wilderness.

Any proposal that does not include "all wilderness" for every WSA in the San Juan- San Miguel is unacceptable and insupportable. The BLM has even failed to come up with any halfway plausible excuses for its token wilderness recommendation. This wilderness proposal is a dirty deal.

Sincerely,

Richard M. Warnick

Richard M. Warnick

59

Colorado-Ute Electric Association, Inc.

P.O. Box 1149
Montrose, Colorado 81402
(303) 249-4501

July 23, 1984

RECEIVED
Bureau of Land Management

JUL 30 1984

Durango, Colorado

Mr. Robert F. Burford
U. S. Department of Interior
Bureau of Land Management
C Street between 18th & 19th Streets
Washington, D. C. 20240

Dear Mr. Burford:

San Juan/San Miguel
Resource Management Plan

Colorado-Ute has reviewed the subject document and has the following comments.

1. Dolores Canyon Wilderness Study Area in Montrose County.

59-1 (138) The BLM preferred alternative would recommend this area for wilderness. Colorado-Ute is very much opposed to this designation. Wilderness designation brings much public attention to an area which would lead to additional layers of protection such as more stringent air quality regulations. The Dolores Canyon WSA is only 15 miles from the Nucla-Naturita area, and a more strict air quality classification for this area would affect economic development activities. Scattered parcels of wilderness areas can have crippling effects on development plans over a widespread area. Therefore, Colorado-Ute requests that the BLM reconsider its preferred alternative of recommending the Dolores Canyon WSA for wilderness and place it in a multiple use management status.

2. Nucla Coal Leasing Area.

Colorado-Ute also expresses its interest in the federal coal resources in the Nucla area. We agree with your preferred alternative of providing the opportunity to lease these coal tracts in the future. We request that

59-2 (56) other known recoverable coal resource areas be added to the tracts listed in your preferred alternative for this area.

Mr. Robert F. Burford -2- July 23, 1984

Thank you for the opportunity to comment on this Resource Management Plan.

Very truly yours,

Jerry C. Kempf
Director of Governmental Affairs

JCK/JAW:dkc

cc: Kannon Richards
Paul W. Arrasmith

60

Henry G. Wright
Attorney at Law
Post Office Box 2312
~~1911 Main~~ Durango, Colorado 81301
303-259-3202

1911 Main

July 26 1984

RECEIVED
Bureau of Land Management

JUL 26 1984

Durango, Colorado

Area Manager
Room 102 Federal Building
701 Camino del Rio
Durango CO 81301

Dear Sir:

60-1 (138) On behalf of both myself and several individuals and organizations, I wish to formally protest the decision of the BLM to remove all but one area from wilderness study. I base this protest upon several points:

1. Both the Resource Management Plan itself and the Wilderness Technical Supplement repeatedly emphasize the unique character of the site excluded, including ecosystems not otherwise included in the NWPS, outstanding opportunities for recreation, and numerous archaeological sites.

60-2 (13) 2. The proposed plan does not take into consideration the possible expansion plans of Hovenweep National Monument. Such an expansion could directly effect such sites as Cahone Canyon, Cross Canyon, and Squaw/Papoose Canyon.

3. It appears that the BLM is attempting to place several of the areas in a de facto wilderness area. While such administrative protection is certainly better than opening the area to resource utilization altogether, it does not permit the permanent protection that the excluded areas deserve.

60-3 (147) 4. Proper weight should be given to public comment, which at least from the Durango area, is almost unanimous against the BLM decision.

5. In addition to protesting the BLM proposal upon wilderness areas, I wish to further protest the BLM preferred alternative for the remainder of the BLM land. Rather than permit the continued short term degradation of the land through intensive grazing and mineral search, the Resource Conservation alternative would allow a more balanced plan which would take into consideration recreation and wildlife values, both of which have considerable (and understated) economic impact upon the surrounding communities.

Thank you for considering our views. I would appreciate it if I could be placed upon the mailing list so as to promptly receive your final decision.

Finally, it is our hope that you reach your decision both within the letter and the spirit of the law. To do this, you must take into consideration the rights of all Americans, not only those who may be seeking short term profit from the land, but also unborn generations who could be cheated of their birthrights if the right decisions are not made today.

Again, thank you for your patience in considering our views. I am looking forward to receiving your final decision.

Sincerely,

Henry G. Wright
Attorney at Law

HGW/ps

61

Wildlife Management Institute
Suite 725, 1101 14th Street, N.W., Washington, D.C. 20005 • 202/371-1808

DANIEL A. POOLE
President
L. R. JAHN
Vice-President
L. L. WILLIAMSON
Secretary
WESLEY M. DIXON, Jr.
Board Chairman

July 23, 1984

RECEIVED
Bureau of Land Management
JUL 26 1984
Durango, Colorado

Mr. Dave J. Miller
Bureau of Land Management
San Juan Resource Area
Room 102, Federal Building
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller:

The Wildlife Management Institute is pleased to comment on SAN JUAN/SAN MIGUEL RESOURCE MANAGEMENT PLAN and ENVIRONMENTAL IMPACT STATEMENT, Colorado.

We prefer the Resource Protection Alternative and the maximum wilderness classification proposed for that alternative.

Alternative descriptions deal with livestock reductions in percents of reduction from the preference of 64,267 AUM. (page 2-29) Not until page 2-64 were we able to find that the average 3 year licensed use was only 55,000 AUM and thus the actual reductions will be much less on a percent basis. A table showing the numerical value of these things is needed along with a more straightforward way of stating them. 61-1 (111)

Most BLM resource plans we have examined use a 5 year average licensed use as a basis. Why was only a 3 year use stated in this one? 61-2 (112)

The team is to be commended for recommending some initial grazing reductions. However, there is little if any information on range conditions or trends on the entire resource area. This is a major deficiency. The appendix statements by allotment are not sufficient to give a picture of conditions on the whole resource area. 61-3 (113)

No detail is provided on where certain grazing systems will be required, where range developments will be constructed or where livestock reductions will be made. Everything will be based on undescribed monitoring that will occur only if funds are available. A section and detailed description on monitoring is needed, and it should include comment on the role of the Colorado Division of Wildlife. 61-4 (114)

DEDICATED TO WILDLIFE SINCE 1911

The costs of range development for the preferred alternative are given as $1 million (page 1-23). While there are 176 permitees on 227 allotments, many are very small and scattered. Assuming that nearly all range improvements will be done on the 71 priority allotments, (page 1-35) then the average development cost per allotment will be $14,085 each. This is a direct subsidy to permitees.

If the available forage increases 13 percent from current active preference (page 1-35), the amount of new forage created will be 8,355 AUM at an average cost of $120 per AUM. Assuming interest of 8% - the $1.37 grazing fee will fall $8.23 short of repaying the government's cost of interest each year. The country can ill afford these subsidies in a time of record national deficits.

Some specific comments follow:

61-5 (115) Page 1-24, Table 1-6. A much better explanation of the resource utilization alternative is needed. How can livestock increase 33 percent and big game increase substantially at the same time?

Page 1-44, Table 1-11, livestock grazing. The use of the phrase "Livestock use could decrease 33 percent..." is not acceptable. Weazel words in a plan such as this are not acceptable.

Page 3-10 "Forest programs could cause significant losses to nongame programs...in limited old growth." This is not acceptable in an area that provides only 1 percent of the area's timber requirements. Timber use for wildlife should be the priority use.

61-6 (116) Page 3-12, Table 3-2. The percent changes in AUM's is misleading. Apply the reductions to the 3 year average use, not the active preference.

These remarks have been coordinated with William B. Morse, the Institute's Western representative.

Sincerely,

Daniel A. Poole
President

DAP:msm

62

Dear Sir,

This letter is being written to comment on the Bureau of Land Management's Wilderness Study Areas in Southwestern Colorado, specifically: Tabeguache Creek, Dolores River Canyon, McKenna Peak, Squaw/Papoose Canyon, Dahone Canyon, Cross Canyon, Menefee Mountain and Weber Mt.

I was pleasantly surprised to learn that most of the Dolores River Canyon was recommended for wilderness designation. I would like to see more of the Dolores River protected, and I think Coyote Wash ought to be protected at least as far west as the Utah border. But I am glad that at least 28,000 acres of that still (relatively) unspoiled area is to be recommended for wilderness protection. 62-1 (139)

On the other hand, I was disappointed (but not at all surprised) to learn that none of the other areas mentioned above is to be recommended for wilderness protection.

I was particularly disturbed by the Bureau of Land Management's failure to recommend that Weber Mt. and Menefee Mt. (especially the former) be protected by wilderness designation. Both of these areas are immediately east of Mesa Verde National Park and are clearly visible (especially Weber Mountain) from the entrance road to the park, and as such ought to be protected. Only through wilderness designation can we have any real assurance that some fast-buck artist -- some glib-tongued huckster -- won't come along and sweet-talk the Bureau of Land Management into allowing him to build a gaudy, honky-tonk eyesore on the land, hoping to waylay the tourists on their way to Mesa Verde National Park and lighten their wallets. 62-2 (138)

All this may sound farfetched, but a few of us remember the gaudy eyesore right in the heart of Rocky Mountain National Park, called (inappropriately enough) Deer Ridge Chalet. And only a few years ago a fast-buck artist from Michigan wanted to turn Great Sand Dunes National Monument into a playground and race course for dune buggies.

The wild and scenic drive up the entrance road to Mesa Verde National Park ought to be preserved at all cost and should not be left to the whim of the head of the Bureau of Land Management.

Sincerely,

Truman P. Young

Truman P. Young
825 Garfield St.
Denver, Colorado
80206

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Bureau of Land Management
JUL 26 1984
Durango, Colorado

63

P.O. Box 715,
Durango, CO 81301
July 26, 1984

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Bureau of Land Management
JUL 26 1984
Durango, Colorado

Mr Dave Miller, Area Manager,
San Juan Resource Area Office,
Bureau of Land Management,
701 Camino del Rio,
Durango, CO. 81301

Dear Mr Miller:

I congratulate you on the Resource Management Plan which you have prepared for the San Juan-San Miguel area and for the consideration you have given to all of the interests involved.

You and your staff have been selected to manage a portion of our public lands. We have charged you with the task of overseeing the use of these lands and resources "for the greatest good of the greatest number in the long run." Most of you have spent years in study and training and have accumulated years of experience in various aspects of this task. Without question you are well qualified. I have confidence that the overwhelming majority of you will carry out this assignment to the best of your ability.

It is regretable that in our society it is necessary for you to expend a large share of your time and energy in explaining your decisions and conducting expensive public hearings . Unfortunately we cannot deny anyone the opportunity to express their desires.

The decisions you will make are difficult. They require much thought,wisdom and courage. I urge you to resolutely defend the course of action that you have selected as being most fitting in view of the many conflicting short term and long term needs and the egoistical and altruistic interests involved. Any concessions you make to narrow pressure groups must be minimal.

I wish you well in your efforts.

Very truly yours,

C. Kenneth Pearse.

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JUL 26 1984

64

DAY - V RANCH

P.O. BOX 4
DURANGO, COLORADO 81301
PHONE (303) 247-8888

July 26, 1984

Area Manager
San Juan Resource Area
Bureau of Land Management
Room 302 Federal Building
701 Camino del Rio
Durango, Co 81301

Re: Draft Resource Management Plan -
Proposed Alternative --
"Public Land Disposal"

Dear Sir:

In connection with the "Proposed Alternative - Public Land Disposal" it is noted that the SE/4 SW1/4 of Section 35, T35N, R9W, NMPM is designated as a parcel to be sold, exchanged or transferred.

The 40 acres referred to above is completely surrounded by property owned by me.

I am interested in acquiring this 40 acres. My preference would be to enter into an exchange proposition.

If I can supply any information in connection with an exchange or acquisition of the acreage, please contact me.

Very truly yours,

F. B. DAVEY, Owner

65

The following comments on the San Juan/ San Miguel Draft Resource Management Plan and Environmental Impact Statement are submitted in behalf of the San Juan Chapter of the National Audubon Society. These comments are organized according to topic.

Wilderness Study Areas

Wilderness is an emotional topic whether one is for wilderness or one is against wilderness. Since only one of eight proposed Wilderness Study Areas is recommended under the Preferred Alternative, there is obviously an emotional bias against wilderness in the BLM. Disregarding emotional prejudice, there are some general comments to be made about the WSA's, as well as specific comments on each area.

65-1 (138) All of the proposed WSA's have more than the minimum requirements of the Wilderness Act and BLM's wilderness study policy. They have outstanding supplemental values for recreation, wildlife, scientific study, and scenic value.

One of the many recreation values of the WSA's is their accessibility in the spring and fall, when the only other wilderness areas, those managed by the Forest Service, are inaccessible because of the snow at high elevations. The BLM WSA's are at lower elevations, and could answer the large demand for wilderness recreation for much of the year. That demand leads to another point about recreation values; wilderness will be a long-term economic gain for the region. Some people fear that wilderness designation will lead to economic loss by limiting minerals exploration. The primary economic base of southwestern Colorado is tourism and recreation, not minerals development. One of the main attractions of this area is its scenic beauty and the large tracts of undeveloped land. The WSA's are needed to help preserve the economic base of southwestern Colorado.

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There is no requirement for an area to be one of a kind or have extensive forests in order to be designated wilderness. A major thrust of the Wilderness Act was to establish wilderness designations in areas with ecological types poorly represented in the present system. BLM is essentially ignoring Congressional direction and public demand by not recommending more of the WSA's.

McKenna Peak

McKenna Peak WSA has no significant resource conflicts and only one similar ecological counterpart in a 200 mile radius. Because of fragile soils, future management plans should limit visitation. Additional representation of this ecological type is needed in the wilderness system.

Dolores River Canyon

We agree with the recommendation. This area is unique. If BLM were to recommend against wilderness designation, we would propose National Monument

65-1 (138) status under Park Service administration.

Cross Canyon

Of all the potential canyon Wilderness Study Areas with similar ecologic types, Cross Canyon has the best recreational opportunities. Its scenic values are superior to Cahone, and the archeological and scientific study values are as great as any of the others. Since BLM proposes a defacto wilderness management subject to the intrusion of uranium mining and oil and gas development for Cross, Cahone, and Squaw/Papoose Canyons, we would prefer a compromise. A more suitable alternative would be to designate Cross Canyon as wilderness, as it has the best wilderness values of the three areas, and to allow development in the other two canyons. This would also allow BLM to assess impacts (by comparison) of development on the Cahone and Squaw/Papoose Canyon Areas.

Weber and Menefee Mountains

65-1 (138) The BLM recommends defacto wilderness management for the Weber and Menefee WSA's, yet does not recommend wilderness designation, which would give them the administrative power to maintain these primitive areas. We recommend wilderness designation because of the scenic, recreation, wildlife, and scientific values of the two WSA's.

65-2 (89) Both WSA's are part of the peregrine falcon habitat of the Mesa Verde nest site, and both have potential peregrine nesting habitat. Both are also potential habitat for the Spotted Owl, a species listed by the U.S. Fish and Wildlife Service as under consideration for probable listing as threatened or endangered, and which has been reported at Mesa Verde. Both WSA's also have potential habitat for several plant species listed by the U.S. Fish and Wildlife Service. A failure by BLM to conduct inventories is not an excuse to dismiss such potential habitat in an Environmental Impact Statement.

The scientific potential and other high wilderness values of these areas warrant the protection offered by actual designation as wilderness.

Review of Preferred Alternative

Minerals

Table 1-2-A Coal Unsuitability Criterion - It is interesting to note that BLM coal regulations determining unsuitability of lands for coal mining are written in such a manner that 1880 acres of potential strip mining immediately beneath the Montezuma Vally Overlook at Mesa Verde National Park can be considered not to impact Federal Land Systems(Criterion 1) or Scenic Federal Lands(Criterion 5). It is also interesting that state critical winter habitat designation for the same area does not invoke Criterion 15 for State Fish and Wildlife. The preferred alternative decision not to lease is proper; however, we feel this land should be removed from any future consideration for coal leasing as well.

Potential losses of oil and gas reserves due to lease stipulations and wilderness designation are insignificant in terms of national consumption rates and resource value. Our suggestions for compromise on additional wilderness would not cause these losses to become significant, and they are balanced by the gain in recreation value.

Loss of deer and elk winter range around Durango is already a major problem. Mining gravel from a large portion of a critical winter range on Ewing Mesa is inappropriate when other sources of gravel are available on private lands not crucial to the wildlife. The end result of winter range loss is fewer big game animals, and decreased revenue in the area from hunters.

If the minerals withdrawal is removed from the McElmo Research Area, the no surface occupancy stipulations and ORV closures should be rigorously applied and enforced.

Seismic activity was not clearly addressed. In areas around McElmo Creek, it is irretrievably damaging the soils, vegetation, and scenery. If BLM does not know which areas cannot be reclaimed after disturbance, the Soil Conservation Service has that information. No use of heavy equipment or large trucks should be allowed on soils which can't be successfully seeded and revegetated in five years.

Wildlife

65-3 (90)

Riparian and aquatic habitat will continue to deteriorate under BLM's decision to unnecessarily delay the implementation of proper management. Therefore, BLM may be in violation of its own regulations, presidential executive orders, not to mention a law or two.

We support the big game management objectives, but would like to encourage greater attention to the needs of non-game species in BLM's management.

We do not see much use in investing funds in wildlife habitat improvements, especially vegetation treatments, when livestock are likely to eat up the results.

Livestock Grazing

65-4 (117)

Continuation of current management of livestock in this area for any length of time is an inexcusable mistake. BLM's own studies show severely deteriorated rangelands, abused riparian habitat, and accelerated erosion on two-thirds of the land tested. Much of the land in decent range condition is that way only because it is too steep to be used by livestock. The carrying capacity estimates show that BLM has been licensing far too many livestock for years. There is no reason to believe that any additional studies proposed by BLM would be more accurate or are needed to determine the cause of all these problems.

65-5 (102)

In fact, the carrying capacity estimates portrayed by BLM are inflated by the generalized methods used to convert field data to final estimates. This This includes: 1) assuming that livestock use on most perennial grass species would be equal even though palatability differs by species, and several species usually occur together in each ecological vegetation type; 2) carrying capacity should be reduced for non-use on rested pastures in a grazing system, or else total use would exceed the proper degree of utilization on the remaining pastures; 3) the maps which show areas excluded from capacity estimates because of excessive slope drastically underestimate unusable lands in many areas.

65-6 (118)

Recognizing the overestimates of carrying capacity, we still cannot see any rationale for the "Maintenance" category allotments' suggested stocking rates (table 9-1-1). Some allotments would be overstocked according to BLM estimates, while others might be understocked. It appears that the BLM intent is to be consistently arbitrary in defense of an irrational policy of "no change".

65-7 (119)

We suggest at a minimum that the final plan incorporate a policy with specific management guidance that BLM would not transfer or allow a sublease of any grazing allotment if the license exceeded the estimated carrying capacity. This policy should apply regardless of the alternative selected. It does not make any sense to invest money in range improvements when BLM

does not demonstrate a serious intent to bring livestock grazing within carrying capacity. In any case, the assumption that increased funding will become available for large-scale improvements to offset improper livestock management is not realistic in light of the large federal deficit, and the spending cutbacks that are going to continue in the foreseeable future. Reducing the amount of grazing is the only realistic answer.

Soils and Vegetation

BLM's recent attention to soils inventory and rangeland ecology are commendable. It does not appear, however, that these resources are being given equal weight with protection of short-term vested interests of the livestock industry. Continued current management of livestock means continued degradation of the rangeland and greater loss of soils.

Timber and Woodland Products

65-8 (14)

Why were timber production capability classification standards not even included in the appendix? Why was there no appendix for woodlands products? One might suspect that the BLM is afraid of what the public might discover.

Cultural Resources

We doubt the BLM has the administrative capacity or the manpower to prevent irreparable loss of cultural resources as a result of impacts from development. It is a sad comment on administration priorities that BLM can estimate its oil reserves on every inch of land, but cannot begin to estimate the number of cultural sites they would impact by developing areas such as Cross, Cahone, and Squaw/Papoose Canyons. The problem with minerals development around these cultural sites is that it is almost impossible, especially with limited manpower, to control the secondary effects of having roads in those areas. These effects are increased pot-hunting, vandalism, and destruction of sites by 4-wheel drive and off-road vehicles. Several hundred hikers don't even come close to the damage created by one ORV.

BLM's prefered alternative does not offer sufficient protection for values of national and world significance. The ACEC designation for the area west of Cortez sounds like an appeal for Congressional funds. If the plan goes unanswered, the development will continue regardless. There is a drastic need for funds in the archeology program for inventory, stabilization, and protection outside of the few remaining undeveloped areas. Perhaps the remaining WSA's with archeological significance should be added to the National Park System for protection while BLM spends its meager resources trying to cope with the development impacts they have already generated.

Economic Analysis and Assumptions

Using a private land lease rate for grazing values on BLM lands when less than two dollars is charged for an AUM greatly inflates the expected return from investment of tax dollars. It does point out that BLM is subsidizing a few livestock operations on a massive scale. The costs of this subsidy in terms of millions of dollars of lost rangeland productivity, soil loss, sedimentation of rivers, and destruction of wildlife habitat has been ignored. At the same time, the livestock industry is insignificant to the area's economy. Realistically, long term benefits to the area's population are being being pushed aside for the short-term benefit of a few people.

In conclusion, we would like to remind the BLM that they are employees of the entire American public, not just mining and livestock operations with vested interests. BLM is a caretaker of public lands for future generations, and it would do well to remember that when finalizing the San Juan/ San Miguel Resource Management Plan.

Thank you,

Carl Weston

Carl Weston
Chairman, San Juan Audubon
Conservation Committee

66

Area Manager
San Juan Resource Area, BLM
701 Camino del Rio
Durango, Co. 81301

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Bureau of Land Management
JUL 27 1984
Durango, Colorado

Sir;

Please enter the following comment into the the official record of public comments on the San Juan Resource Management Plan and Environmental Impact Statement, April 1984 Draft.

Absence of extractable resources of commercial value has been wrongly used as a determining criterion for wilderness status recommendation of several of the WSAs in The San Juan Management Proposal. The Wilderness Act does not require absence of commercially valuable resources as a condition of wilderness status. Rather it reserves to Congress the right to determine future patronage for commercial extraction rights on wilderness lands. The San Juan Management Plan attempts to circumvent the Wilderness Act by withholding wilderness status recommendatio for WSAs that are tacitly admitted to be of wilderness quality as demonstrated by the proposal to manage them as though they were wilderness with little or no surface disturbances or entry. This in effect reserves to BLM instead of Congress the right to control patronage for commercial extraction rights of [redacted] resources by sacrificing wilderness for organizational rather than environmental reasons.

Carl Weston
3905 Hiway 550
Durango, Co. 81301

Carl Weston

67

United States Department of the Interior
BUREAU OF MINES
P. O. BOX 25086
BUILDING 20, DENVER FEDERAL CENTER
DENVER, COLORADO 80225
Intermountain Field Operations Center

July 25, 1984

Memorandum

To: Dave J. Miller, Area Manager, San Juan Resource Area, Bureau of Land Management, Room 102, Federal Building, 701 Camino del Rio, Durango, Colorado 81301

From: Chief, Intermountain Field Operations Center

Subject: Draft resource management plan/environmental impact statement for the San Juan-San Miguel planning area

Personnel of the Intermountain Field Operations Center, Bureau of Mines, have reviewed the subject reports, as you requested.

The reports describe and analyze four alternatives for managing 994,000 acres of public lands (plus 297,000 acres of Federal mineral estate) and resources in southwestern Colorado. Our comments concern the management of the Federal mineral resources in the planning area and thus are most closely related to the planning issue of mineral development.

67-1 (57) Mineral resources of the planning area are described adequately in the report (pp. 2-4 to 2-12). To put these resources into better perspective, however, we suggest an acknowledgment that the planning area includes the premier producing regions in Colorado today for uranium and vanadium, gold, and carbon dioxide; moreover, the area contains, and has yielded substantial quantities of coal, oil and gas, and base and precious metals. Second, we wish to

67-2 (58) emphasize that these resources are known or may occur throughout much of the planning area, as noted in the discussion of the report, and are not limited to the much smaller areas identified on figures 2-1a and 2-1b. Although

67-3 (59) they show some of the highly favorable areas for minerals, these illustrations are somewhat misleading, as labeled, because they only tell part of the story. Third, the Silverton area (p. 2-11) deserves special mention: it is one of the most intensely mineralized base and precious metal mining regions in Colorado; gold and other metals have been produced there almost continuously since deposits were discovered 110 years ago. Cumulative value of mineral production from the Silverton area is about $200 million.

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67-4 (60) The discussion and analysis (ch. 3) about impacts on energy and mineral resources under each alternative appears to be incomplete, at least for the preferred alternative (pp. 3-54 to 3-56). Although the loss of estimated oil and gas resources, because of the decision not to lease certain areas, is discussed, the apparent commitment of substantial coal reserves and possible

67-5 (61) uranium and vanadium resources in the same areas is not mentioned. If the Menefee Mountain and Weber Mountain areas would not be available for oil and gas leasing, as stated, we presume that the 95 million tons of coal reserves there likewise would be lost. Similarly, we believe that management emphasis for cultural resources that precludes oil and gas leasing in Cahone, Cross, and Squaw/ Papoose Canyon areas probably would adversely affect uranium and vanadium resources in two of these areas that are highly favorable for such resources. These impacts should be addressed.

67-6 (62) In addition to no leasing for oil and gas on nearly 57,000 acres, no surface occupancy would be stipulated on more than 39,000 acres in the planning area, and 317,000 acres would be subject to seasonal restrictions. Although the seasonal restrictions on surface occupancy probably would not affect oil and gas operations greatly, we believe that significant adverse impacts on oil and gas resources could occur in areas with no surface occupancy and should be discussed.

67-7 The summary of impacts (p. 3-56) should be amended to include the possible loss of 4.2 billion cubic feet of gas in the Dolores River Canyon area and the presumed loss of coal reserves in the Menefee and Weber Mountain areas.

67-8 (64) Finally, the report should specifically address how proposed change in management emphasis (to recreation) would affect mineral exploration and development in the Silverton and Dolores River Special Recreation Management Areas (SRMA). As we understand it, SRMA designation implies that recreation is the principal management objective (App. 5), and mineral development would be managed to limit conflict with recreation values. We question any attempt to down play the potential significance of mineral development, particularly in view of the long productive history of mining activity in both areas.

Donald P. Blasko

Donald P. Blasko

2

68

4700 Venturi Lane
Ft. Collins, CO 80525
July 24, 1984

Mr. David J. Miller, Area Manager
San Juan Resource Area
Bureau of Land Management
Room 102, Federal Building
701 Camino del Rio
Durango, CO 81301

Dear Mr. Miller:

68 (83) As a professional biologist and botanist who is a frequent visitor to southwestern Colorado's unusual botanical areas, I would like to go on record as strongly supporting the nomination and inclusion of East Paradox Creek and Spring Creek as ACECs, and of Coyote Wash as an RNA in the San Juan Resource area RMP. These areas contain several rare and endemic plants such as Lupinus crassus, Psoralea aromatica, and Erigeron kachinensis, as well as biologically important good condition examples of "slick-rock" vegetation and the Hilaria-Oryzopsis-Stipa type of Great Basin Grassland. In addition, the Coyote Wash-Dolores Canyon area has spectacular scenery and is one of very few areas in the southwest that has not been thoroughly degraded by livestock. It is inconceivable to me that the scientific and scenic values of these areas went unrecognized in the Draft RMP, and I hope that this situation will be remedied in the final version of the RMP. The employment of a competent botanist or plant ecologist on the BLM staff might help avoid such omissions in the future.

Please address these concerns and include my letter in the final RMP.

Sincerely yours,

Myrna P. Steinkamp

Myrna P. Steinkamp, Ph.D.

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Bureau of Land Management
JUL 27 1984
Durango, Colorado

69

Montezuma County Administrative Office
Room 302 - Courthouse
109 West Main Street
Cortez, Colorado 81321-3189
(303) 565-8317

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Bureau of Land Management
JUL 27 1984
Durango, Colorado

July 25, 1984

David Miller
Bureau of Land Management
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller,

69 (102) On behalf of the Montezuma County Commissioners I would like to take this opportunity to express concern relating to your decreased livestock grazing recommendations for the public lands in Montezuma County.

Since its inception Montezuma County has been heavily dependent on the livestock industry to provide the main stay for economic stability. The livestock industry in turn depends on the public land to provide a much needed, affordable source of grazing. Any change relating to this grazing program on the public land will directly effect the economy in Montezuma County.

I think it is also appropriate to mention that grazing by livestock is the only method of harvesting public grassland and converting it into a product suitable for human consumption.

If I can be of assistance or if I might answer any questions please feel free to give me a call.

Sincerely,

Thomas W. Weaver
Administrator

TJW/mw

70

Area Manager
San Juan Resource Area
Bureau of Land Management
Federal Building
701 Camino del Rio
Durango, Colorado 81301

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Bureau of Land Management
JUL 27 1984
Durango, Colorado

July 24, 1984

Kirk Koepsel
11608 S. Apache Tr.
Conifer, CO 80402

Dear Area Manager:

I have just reviewed The Draft Resource Management Plan for the San Juan/San Miguel Planning Area, and would like to express a few of my ideas and concerns in regards to the plan.

70-1 (138) The wilderness proposal in the plan was horrible. Only one out of the eight wilderness study areas was recommended for wilderness. Many of the other seven areas I have personally visited and feel that they all possess outstanding wilderness characteristics. Many of these study areas if designated wilderness would be unique additions to our wilderness system here in the United States, either because of their biological or physiological characteristics. All eight W.S.A.s should be designated wilderness.

70-2 (23) Another concern that I have and feel was a gross oversight on the part of the Bureau of Land Management was that the area linking the Cutthroat Castle section to the Holly and Horseshoe House sections of Hovenweep National Monument was not designated an ACEC or given special protection under the emphasis F catagory in the preferred alternative. Hovenweep National Monument is one of the best examples of Anasazi culture in the planning area, but suffers because its disjointed and scattered ownership does not allow for protection of the surrounding resources. The Bureau of Land Management should be willing to work in cooperation with the National Park Service by helping to protect the resources surrounding the monument instead of doing the opposite and cause degradation of those resources through energy and mineral development.

I sincerely hope that these problems can be resolved in the final environmental impact statement. Thank you for considering my comments.

Sincerely yours,

Kirk Koepsel

Kirk Koepsel

71

4700 Venturi Lane
Fort Collins, CO 80525
August 24, 1984

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JUL 27 1984
Durango, Colorado

Mr. David J. Miller, Area Manager
Bureau of Land Management
San Juan Resource Area
Room 102, Federal Building
701 Camino del Rio
Durango, CO 81301

Dear Mr. Miller:

I am a research plant scientist who has a deep interest in and concern for preservation of native plants and vegetation. With that background, I wish to comment upon some of the provisions of the San Juan/San Miguel Draft Resource Management Plan.

71-1 (83) The Colorado Native Plant Society has nominated three sites (Coyote Wash, East Paradox Creek, and Spring Creek) for ACEC or RNA designation. Knowing the rare and sensitive plants and vegetation associations of those sites, I strongly support such designation. The Draft RMP recognizes the rare and sensitive plants of the San Juan/San Miguel Area, but I believe that formal designation and development of an appropriate management plan for each site is the best way to assure long-term preservation of the important biological features of each.

71-2 (138) I favor designation of all eight WSA's as Wilderness in the Final RMP (the All Wilderness Alternative within the Resource Conservation Alternative). We cannot afford the loss of these potential wilderness areas to other uses. Wilderness designation would provide, in the long term, net positive effects on the native vegetation, in addition to the many other positive values of wilderness.

The Resource Utilization Alternative's provision for Wild Horses receives my endorsement. Although I realize the pleasure many derive from seeing wild horses, they represent an unnatural component of the ecosystem and are capable of inflicting significant negative effects on their environment.

71-3 (133) Finally, I support greater restriction of ORV use than proposed in any of the Draft RMP Alternatives. Having seen first-hand numerous examples of the destructive capabilities of such vehicles, I can find no rationalization for permitting their continued severe effect on the natural landscape. I favor restricting ORVs to specifically designated, marked trails only.

Thank you for the opportunity to comment on the Draft RMP. Please include my comments in the final RMP.

Sincerely yours,

Susan S. Martin

Susan S. Martin, Ph.D.

72

IN REPLY REFER TO:

United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
SOUTHERN UTE AGENCY
P.O. BOX 315
IGNACIO, COLORADO 81137

RECEIVED
Bureau of Land Management
JUL 27 1984
Durango, Colorado

JUL 27 1984

Dave Miller, Area Manager
Bureau of Land Management
San Juan Resource Area
Room 102 Federal Building
701 Camino del Rio
Durango, CO 81301

Dear Sir:

Re: San Juan/San Miguel Resource Management Plan

Thank you for the opportunity to comment on the subject plan. This Agency feels that the development of the Durango Known Recoverable Coal Resource Recovery Area (KRCRA) will provide the usual adverse impacts which will affect not only the immediate area of impact, but the Southern Ute Reservation as well.

72-1 (54)
1. Heavy truck traffic to further accelerate the deterioration of roads and aggravate an already high traffic density.
2. Contribute to ground and surface water contamination.
3. Air quality may be affected despite the expressed desire for shaft mining by adjacent property owners.
4. Development of the Durango KRCRA could create a local coal "glut" and affect, at least temporarily, the value of the Southern Ute Tribe's coal resources.

With regard to the development of the 71 Allotment Management Plans, and subsequent initial reduction of 22,461 AUM's an impact of this nature could affect the Southern Ute Tribe's grazing resources as more forage is sought by stockmen. The Southern Ute Tribe might be able to absorb a small part of the displaced AUM's that will be displaced either by your sale of land with grazing allotments or as a result of your proposal for range improvement work.

In considering the sale of public lands, either the Southern Ute Tribe or Jicarilla Apache Tribe may be interested in buying the BLM tract on the southeast side of Archuleta Mesa when it is formally advertised for sale and should be given the first opportunity to do so.

CONSERVE AMERICA'S ENERGY

Save Energy and You Serve America!

72-2 (15) One serious deficiency in the RMP is that of "Consultation and Coordination". It is stated that "Consultation and Coordination with agencies, organizations and individuals have occurred in a variety of ways throughout the planning process". We find this statement to be ambiguous and misleading. With the exception of reviewing the draft EIS/RMP, neither this Agency or the Southern Ute Tribe were involved in consultation or coordination.

Although letters requesting Tribal policies regarding public lands were requested, when one considers the impact of your proposed RMP/EIS it would have been appropriate to request Tribal plans which deal with the Tribe's proposed use of their lands in order to avoid possible conflict.

We hope these comments are useful in the final development of your RMP/EIS.

Sincerely,

Superintendent

Sierra Club
Rocky Mountain Chapter

73

Indian Peaks Group of the
Siera Club

Merry Havens, Chairperson
1305 7th Street
Boulder, Colorado 80302
July 23, 1984

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Bureau of Land Management

JUL 27 1984

Durango, Colorado

BLM Area Manager
San Juan/San Miguel Resource Area
701 Camino del Rio
Federal Building Room 102
Durango, Colorado 81301
Attention: Mr. Dave Miller

Dear Mr. Miller:

These comments are made by the Executive Committee of the Indian Peaks Group (Boulder County) of the Sierra Club, representing some 1,500 members. Please include these comments as part of the public comments for the BLM Draft Resource Management Plan (RMP) Environmental Impact Statement (EIS) for the San Juan/San Miguel Resource Area (RA) as a follow-up to oral comments made on behalf of our members on June 28, 1984 by myself at the public hearing in Golden.

We are dismayed and alarmed at the amount of Wilderness Study Areas (WSA) not recommended for formal protection under the Wilderness Act. Designated Wilderness is the only guarantee that the land will be protected as wilderness as intended by Congress. These eight WSAs possess outstanding wilderness characteristics, are ecologically unique and worthy of permanent protection. The alternative administrative type of protection does not provide a real wilderness option with low unlimited ORV use (in lieu of the 79% proposed in the Preferred Alternative) for example. The ACEC designation is good, but not strong enough to protect these areas under development oriented administrations.

The Preferred Alternative recommends only the Dolores River Canyon WSA (except for the Coyote Wash and Nyswong Mesa sections) as wilderness, while listing much of the "Resource Emphasis" (p. 1-36) for the other seven WSAs as very compatible with wilderness designation. In McKenna Peak, Menefee Mountain, Tabeguache Creek and Weber Mountain, for example, all of the listed emphasized resources are suitable under wilderness protection.

The ACEC protection offered for the 156,000 acres of Anasazi Cultural Area west of Cortez would mean intensive management of the resources in the ACEC in order to protect the sites from vandalism. This protection seems unlikely with reductions in overseeing agencies. This type of designation cannot guarantee responsible stewardship.

This is an important and timely issue as we face increased use of wilderness areas yearly, as the wilderness areas themselves are being lost forever. Because there is less than 2% U.S. land in the lower 48 states remaining de facto wilderness, it is time that we act to protect these lands from largely speculative and highly destructive development. It is estimated that wilderness use increases at a rate of between 10 and 15% per year. If we do not add that much wilderness to our system, it means the value of the existing wilderness values of solitude and being untrammeled are lost forever.

73-1 (65) Coal leasing in BLM land (1.5 billion tons are recommended in the Preferred Alternative) should be halted until the Federal Coal Commission on Fair Market Value has determined that the bids are legitimate and all the the established environmental requirements have been met. The enforcement power of OSM field inspectors has deteriorated under President Reagan's administration which allows enforcement action against coal operators in violation of law to be decreased by 30%. In 1982, the OSM had failed to collect $40 million in fines owed to the federal government by coal operators. Each week, a thousand acres of land are disturbed by surface mining for coal in the U.S. Coal mining causes massive damage in the East, where spoil is pushed over mountainsides causing landslides and erosion, and loss of life. Here in the West, coal mining fragile land in arid climates makes restoration of vegetation a near impossibility. It contaminates precious ground water. It kills people; an estimated 50 to 130 deaths per coal-fired plant-year. (From Energy in America's Future, Sam H. Schurr, et al.)

73-2 (80,133) The range of alternative land use in the four alternatives is almost negligible. For example, the acreage for oil and gas leasing ranges from 65 - 73 %. The acreage of land left in poor condition ranges from 27 - 36 %. The amount of land open to indiscriminate ORV use ranges from 79 - 95 %. This type of non-representative range of alternatives does not lend itself to choices that may indeed be superior.

73-3 (138) We recommend, as did every speaker at the hearing on June 28, that the BLM consider proposing in the final EIS for the San Juan/San Miguel RA all of the Dolores River Canyon, Tabegauche Creek, McKenna Peak, Weber Mountain, Menefee Mountain, Cross Canyon, Cahone Canyon and Squaw/Papoose Canyon as wilderness in a Preferred Alternative and lower wilderness degrading uses such as oil and gas leasing, coal leasing, timber harvest, livestock grazing and indiscriminate ORV use. The compromise that you offer in the San Juan/San Miguel draft RMP and EIS is not sufficient to provide for the ever-increasing demand for wilderness.

We appreciate the opportunity to make comments on behalf of our members. Thank you for providing this opportunity in a location convenient enough that we may attend the hearings. We hope that the BLM will continue to hold these important hearings in Denver.

Thank you,

Merry Havens, Chairperson
Indian Peaks Group of the
Sierra Club

74

July 25, 84

Dear Dave,

74 (83) I would like you to designate East Fork Creek and Spring Creek as Areas of Critical Environmental Concern in your Resource Management Plan for the San Juan Resource Area. Please designate Coyote Wash as a Research natural area. The area is important for some very nice plants that are endemic to small areas of western Montrose County and into eastern Utah. These plants should not be destroyed by over grazing. The plants should be left in area so that we can live there also. Man is destroying so many plants that have lived the alot longer than man has. I support and am a member of the Colorado Native Plant Society. Please add my comments to your final Resource Management Plan.

RECEIVED
Bureau of Land Management

JUL 27 1984

Durango, Colorado

Yours truly,

Scott Hetler
301 W. Montezuma
Cortez, Co. 81321

75

LEAGUE OF WOMEN VOTERS
22 Cutler Drive
Durango,Colo. July 26,1984

Area Manager,San Juan Resource Area
BLM, Room 102, Federal Bldg.
701 Camino del Rio
Durango, Colo.

Dear Sir;

The League of Women Voters of Durango wishes to make the following comments on the EIS of the San Juan-San Miguel Resource Management plan:

75 (138) 1.) In regard to wilderness designations,we in the Durango League feel that your agency should recommend four areas for wilderness designation: Weber Mountain,Cross Canyon, McKenna Peak AND the Dolores River Canyon. Together, the four areas would provide the greatest breadth of environmental variety found within the Resource Area. Their joint Wilderness designation would provide a priceless heritage for future generations who will inhabit this rapidly-growing region.

2.) In addition to environmental protection, the LWV has a long-standing position on water quality. The protection of the watershed in your jurisdiction to the end stated in the EIS of reducing the salinity of the Colorado River is of prime importance to the LWV. (The Colorado River affects so many jurisdictions in its course that your positive actions in reducing salinity most certainly will be favorably viewed by the U.S. Congress.)

3.) We commend your consideration of the Anasazi Advisory Committee's recommendations. The Colorado LWV actively favors archeological site preservation. We strongly concur with the Anasazi Committee's recommendation that BLM increase monitoring of protected Anasazi sites. (Incidentally, we are pleased to note that allowable cattle operations would be required to install BLM specified fencing.)

We in the Durango League are most appreciative of BLM's diligent stewardship of their land in this Resource Area. Please note that our comments on the EIS are made with specific reference to our member-approved state and national positions.

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Bureau of Land Management
JUL 27 1984
Durango, Colorado

Sincerely yours,

Margaret A. Langworthy,Pres.

76

Area Manager
San Juan Resource Area
Bureau of Land Management, Room 102
Federal Building, 701 Camino del Rio
Durango, CO 81301

25 July 1984

RECEIVED
Bureau of Land Management
JUL 30 1984
Durango, Colorado

re: Draft RMP for the San Juan Resource Area

Dear Sir or Madam:

As a former resident of Dolores and a botanist with experience in your area (I worked for two seasons on the SVIM project for the Montrose District) I endorse the nomination by the Colorado Native Plant Society of two sites for designation as ACECs and one site as a RNA.

76 (83) I strongly support the designation of these three special areas (East Paradox Creek, Spring Creek, and Coyote Wash) as proposed by the CONPS and hope that you will include them in the Final RMP for the San Juan Resource Area.

Please include my letter in the Final RMP and send me a copy of the Final when it is completed.

Sincerely,

Mark Bagley

Mark Bagley
Botanical Consultant
P.O. Box 1909
Ridgecrest, CA 93555

77

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Bureau of Land Management
JUL 30 1984
Durango, Colorado

Lawrence E. Phelps
34511 West Highway 50
Gunnison, CO 81230
July 27, 1984

Area Manager
San Juan Resource Area
Bureau of Land Management
Room 102, Federal Land Building
701 Camino Del Rio
Durango, CO 81301

Dear Sirs:

The CCA/CWCA Information Steering Committee would like to respond to your draft of the San Juan, San Miguel Resource Management pland and off the following comments.

As you know, our committee toured part of the area in June and the following is a summary of the comments collected from most of the committee members and is being submitted by the committee chairman, Lawrence E. Phelps.

77-1 (102) Under the preferred alternative, a 33% reduction in livestock use if proposed under the short term with a 13% increase proposed under the long term. This is a drastic reduction in livestock use and we object to it very strongly for the following reasons:

77-2 (91) 1. We have toured several of the allottments and have seen evidence of severe over grazing by wildlife and wild horses. Yet, you are proposing to manage and maintain the deer and elk populations at their present levels, (20,000 deer and 1,600 elk). We object to this because alot of the allottments have seen an increase of wildlife use of several hundred percent in the last few years, and these are some of the allottments that are stated for heavy reductions.

We feel that if there has to be reductions, the wildlife has yet to stand their share. We don't see the fairness or the thinking of reducing livestock 33% and wildlife none at all. Eventhough, we doubt seariously if any or at least very much livestock reduction is justified and if it is it has been caused in some cases by drastic increases in wildlife numbers resulting in overgrazing by wildlife.

77-3 (120) 2. The 13% increase proposed under the long term sounds good. However, I will have to say it has sounded good in all the other EIS statements we have reviewed. The only thing wrong is that very little if any of the improvement work needed to bring about these increases has been done, and with the money situation being like it is, it will be many years before alot of this work is completed, if at all. Yet,

Bureau of Land Management
Page Two
July 27, 1984

many permittees has accepted your actions in other areas on the promise that their use would be increased.

3. In regards to wild horses, we recommend that all wild horses in the resource area be removed. The Spring Creek herd has been allowed to increase from 24 to approximately 100 resulting in damage to the habitat, and extreme hardship to the permittee. That is very noticable by the fact that the permittee on Spring Creek has an active preference for over 2000AUMS, yet, he is using only a little over 800 AUMS. The 100 wild horses are using the other 1200 AUMS of the permittees preference. We feel that this is very badly out of balance.

77-4 (121) 4. We are unable to determine how the justification for the 33% reduction was arrived at, and even though we are familar with the five year monitoring plan before reductions are implemented, would like to know what kind of data was used to dtermine what the proposed reduction should be.

77-5 (122) Alot of the allottments in this resource area are fall, winter, and spring use. We see a trend to reduce spring use to a very small minimum. Spring use to most livestock operations is very critical and loss of spring use could result in severe hardship to the livestock operators.

We thank you for the opportunity to respond to the draft. We would hope that our comments will be seariously considered.

Respectfully submitted by,

Lawrence E. Phelps

Lawrence E. Phelps, Chairman
CCA/CWCA Steering Information Committee

np

78

Norm Mullen
1975 Norwood
Boulder, CO. 80302

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Bureau of Land Management
JUL 30 1984
Durango, Colorado

Dave Miller
San Juan Resource Area Manager
Bureau of Land Management
Room 102, Federal Building
701 Camino del Rio
Durango, CO. 81301

Dear Mr. Miller,

I am submitting these comments on the San Juan/San Miguel Resource Management Plan for the record and for your review and consideration.

First, I object strongly to your non recommendations on wilderness study areas. These areas have many special values that are not protected in the National Wilderness System.

I urge you to change your recommendations for Weber and Menefee Mountains WSAs. Their excellent wildlife-- bighorn sheep, mule deer, mountain lion, and bear -- justify protection as wilderness.

I also support wilderness recommendation for Squaw/Papoose, Cross, and Cahone Canyons WSAs. These areas contain vast archeological treasures that merit protection, along with their sagebrush ecosystem, not protected as wilderness anywhere else.

78 (138)

McKenna Peak is one of the most impressive badlands areas I have ever seen. It has excellent wilderness character, and should be recommended.

I also support Tabeguache Creek WSA. The West End needs some wilderness, and this area is highly qualified.

The Dolores River Canyon is an outstanding example of desert canyon country, and strongly merits protection. I agree with your recommendation for this area.

Administrative classifications and management prescriptions are not enough to protect these fragile areas. They need wilderness designation that can not be changed at the whim of a James Watt.

Range condition needs to be significantly improved. Too much of the rangeland remains in poor condition.

I think that the establishment of an ACEC to protect the Anasazi archeological sites is a good idea, but wilderness designation for the eligible WSAs is much better and stronger protection.

Thank you for your consideration of these comments.

Norm Mullen

79

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Bureau of Land Management
JUL 30 1984
Durango, Colorado

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
COLORADO SUBOFFICE
730 SIMMS STREET, SUITE 292
GOLDEN, COLORADO 80401

July 26, 1984

MEMORANDUM

TO: Area Manager, Bureau of Land Management, Durango, Colorado

FROM: Assistant Field Supervisor, Ecological Services, Golden, Colorado

SUBJECT: Review and Comments - San Juan/San Miguel RMR/DEIS EC # 84/20

We have reviewed the subject document and wish to offer the following comments for your consideration in preparation of the FEIS.

General Comments

Generally we found the DEIS to be comprehensive, well written and easily understandable. Clarity could be improved by placing the name of the alternative being discussed as a page heading when the alternatives are being discussed in detail (particularly in Chapters 2 and 3). Without this the reader must continually search for the one poorly marked alternative heading to compare the alternatives.

A major concern of the FWS is that the land disposals of each or any alternatives receiving future consideration, are closely coordinated with other agencies and that:

79-1 (16)

1) Fish and Wildlife resource values and
2) Public access to other resource lands, are given full analysis and consideration prior to any committments for disposition.

It appears that all alternatives include the potential for adverse impacts associated with land disposal. Such actions could affect valuable fish and wildlife resources ranging from critical big game habitats to loss of riparian areas or habitats utilized by threatened or endangered species. Our concern is that thorough consideration of all management alternatives and the concerns of other public agencies are conducted before irretrivable committments or decisions are made for disposition of public domain.

79-1 (16)

Specific Comments

Page 1-10 Paragraph 3 states:

"Appendix 4-B contains examples of possible mitigating measures for coal leasing."

Comment: We can find no measures in this appendix which require mitigation of the fish and wildlife resources by BLM. We suggest that measures similiar to Sec. 31 (2) and (3) (page 4-B-3), be written to specifically address mitigation of impacts on fish and wildlife habitats and requirements to such by lessee's.

79-2 (66)

Page 1-10 last paragraph, 2nd sentence

We believe that resource protection should be considered in addition to the management efficiency of such transfer.

Page 3-5 Paragraph 3

The protection of the peregrine falcon eyrie would appear to be a part of all alternatives which may affect this area under Criterion Number 9 of the Coal Unsuitability Application. As such it does not appear to be an alternative dependent management decision.

79-3 (92)

Page 3-9 Paragraph 1, last sentence states:

"Properly placing and designing improvement projects could lessen some of the possible adverse impacts to vegetation."

Comment: All of the vegetative impacts associated with this alternative appear to be beneficial. What are the "possible adverse" impacts which are alluded to?

79-4 (84)

Page 3-58 Summary, last sentence states:

"Land Disposal could cause losses of riparian values and winter ranges".

Comment: Again, our concern is that areas with high public values (i.e. valuable wildlife habitats) are either retained in Federal ownership, or transferred and managed for these values to mitigate these losses.

79-1 (16)

Summary

The FWS has expressed concern that land disposition included in the major RMP alternatives could result in irretrievable adverse impacts on fish and wildlife resources. We recommend that the BLM make a detailed list of properties under disposal consideration and that this list be provided to State and other Federal agencies for review prior to any further disposal actions.

79-1 (16)

Additionally, we have comments and concern on the application of the coal unsuitability criteria which we will submit apart from the DEIS review process.

Thank you for the opportunity to comment on this DEIS.

cc: FWS/EC, Washington, D. C.
FWS/HR, Denver, CO
FWS/ES, Salt Lake City, UT; Grand Junction, CO
CDOW, Denver, CO; Montrose, CO

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Bureau of Land Management

JUL 30 1984

Durango, Colorado

FULTON – BENNETT RANCHES

P.O. Box NO. 404
Cortez, Colorado 81321

July 27, 1984

80

San Juan Resource Area
Bureau of Land Management
Room 102, Federal Building
701 Camino del Rio
Durango, Colorado 81301

80 (102)

In regard to the San Juan Resource Management Plan. It is obvious that the prefered alternative is the best selection offered, however, I would like to object to the figures shown for present estimated capacity, Table 9-E, Page 9E5. I realize that the range study used was taken during an extremly dry period, however, the figures shown in the table are unreasonably low. During that dry period I used my usual no. of AUMs with no bad effect to my cattle and then when the weather returned to normal, so did the range conditions, therefore, I feel that my present no. of AUMs are proper for the worst of years. I have been assured that these figures are to be used as a guide-line and not be strictly adhered to, however, I am aware that BLM personnel change and also BLM Policy changes have occurred and I would feel more comf-ortable if the published figures were more realistic.

I appreciate this opportunity to express my opinion on this matter and would like to thank the personnel of the Durango office, especially Bob Stanger, for helping me try to understand this management proposal.

Thanks

Jim Fulton

Jim Fulton

81

THE WILDERNESS SOCIETY

FOUNDED IN 1935

July 26, 1984

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Bureau of Land Management

JUL 30 1984

Durango, Colorado

Mr. Dave Miller, Area Manager
San Juan Resource Area, BLM
Room 102, Federal Building
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller:

The Wilderness Society appreciates the opportunity to comment on the San Juan/San Miguel Resource Area RMP/EIS. While we were unable to attend the Denver-area public hearing because of a schedule conflict, we are pleased that BLM recognizes the importance of its management decisions to all residents of Colorado, not just those in the immediate vicinity of the RA, by scheduling such a hearing. However, our review of the RMP/EIS leads us to conclude that BLM does not extend this recognition to a commitment to fully and fairly consider public input in its land use planning process, or to the Wilderness Study Policy mandated by FLPMA. BLM's recent elimination of its wilderness specialist position on the Montrose District is further indication that the agency is giving only illu-sory attention to wilderness values and protection. Not only are wilderness studies not even begun on the Uncompahgre Resource Area, management plans have not been prepared for any of the poten-tial wilderness areas on the District. We question BLM's wisdom in making such a decision just when the Powderhorn ISA is likely to be added to the National Wilderness Preservation System.

81 (138)

We are extremely concerned about BLM's wilderness recommenda-tions for the San Juan/San Miguel Resource Area. Despite over-whelming evidence that all eight areas under study are eminently suitable for inclusion in the NWPS, only 28,366 acres (the Dolores River Canyon WSA), out of a possible one million acres, are recom-mended for designation -- suggesting a built-in, anti-wilderness bias on the part of BLM. We are baffled by BLM's resistance to wilderness designation, especially in light of the agency's own

-continued-

SOUTHWEST REGION
1720 RACE STREET, DENVER, COLORADO 80206
(303) 388-5801

81 (138)

assessment of the "nationally significant, unique combination of ecological and supplemental values" found in the eight WSA's of the San Juan/San Miguel RA. These eight areas would add diverse ecological values to the NWPS, which currently represents only 82 of the 300+ ecotypes found in the United States.

BLM offers no justification for denial of recommendations on these areas other than coal lease conflicts which it says make wilderness management "difficult." We suggest that there are options BLM appears unwilling to explore -- including exchange of leases with owners for mineral rights outside the WSA's, such as has been done in New Mexico's San Juan Basin Bisti WSA. We believe BLM's carte blanche dismissal of two of the eight areas based on coal lease conflicts fully reflects and demonstrates the public charges made against the agency at the Public Lands Subcommittee Oversight Hearing held in Washington, D.C. on June 19, 1984 -- that BLM is intent on undermining the basic tenets of FLPMA, which calls for protection of "the quality of scientific, scenic, historical, ecological, . . . and archaeological values" of the public lands, and for their "preser[vation] and protect[ion] in their natural condition" [Sec. 102(a)(9)].

The BLM apparently believes it can appease public demand for wilderness by proposing alternative administrative -- rather than Congressional -- designations for several of the areas on the RA, an assumption which is neither accurate nor appropriate. Admini-strative protection is inherently fraught with conflicts -- without the force of law, it provides little guidance to the local land manager, since its foundation is based solely on the discretionary approval of the top management of the agency, which changes easily with the shifting of administrations and officials. Pressures from local, state or regional interests to change the land status of administratively protected areas will also reflect changes in the administration and the economy -- many of which are short-term, some long-term -- all to the detriment of those so-called "protected areas." It may be impossible for BLM to withstand such pressures without Congressional law to enforce the agency's position on the preservation of natural values. The public's experience with Forest Service administrative designations in the 1930's, 40's and 50's led directly to the establishment of the Wilderness Act. The Forest Service then, and the BLM now, cannot resist pressures to de-designate administratively protected lands. Only Congressional designation of wilderness has proven effective.

-continued-

We believe the tremendous diversity of archaeological, cultural and natural resources on the eight WSA's in the San Juan/San Miguel RA require that BLM make a more honest and open-minded effort to respond to public input in its final wilderness recommendations. The Dolores River Canyon WSA is undoubtedly one of the finest examples of BLM wilderness, but it represents only 3% of the total area under study on the RA -- a mere drop in the proverbial bucket -- and the Bureau must recognize this shortcoming. "Taking the easy way out" by providing administration protection for only 7% of Tabeguache WSA and most of Cross, Cahone and Squaw/Papoose Canyons, instead of Congressional designation -- or, as in the case of Weber/Menefee Mountains and McKenna Peak, no protection at all -- is a misguided and unconscionable attempt on BLM's part to ignore the importance of these WSA's to the NWPS, the American public, and to Colorado citizens, in particular.

We strongly recommend that BLM change its preferred alternative in its Final EIS to include wilderness designation for each of these eight nationally significant areas.

Very truly yours,

Michael D. Scott
Regional Director

MDS/ces

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Bureau of Land Management
JUL 30 1984
Durango, Colorado

July 26 1984

82

Area Manager
San Juan Resource Area

Dear Sir:

Please accept this letter as my written comments on the San Juan/ San Miguel Draft Resource Management Plan and EIS. My name is Paul T Petersen. I live and work in Grand Jct., which has been my home for 25 years. I attended the University of Utah where I obtained a Bachelors Degree in Environmental Studies. It has been my pleasure to visit many places in the Resource Area. In particular, I have been i the Dolores River WSA twice, the Cross and Cahone Canyons, parts of the Uncompaghre Plateau and along the hiways throughout the area. The basic areas I would like to address are the sparse wilderness recommendations and the lack of significant variation between alternatives in certain resource aspects. The alternatives pertaining to grazing, ORV use, oil and gas leasing, mineral leasing and salinity control do not vary significantly between alternatives, with the exeption of the no grazing alternative.

First I would like to give my assessment of the recommendations concerning wilderness in the Wilderness Technical Supplement. Thank you for recommending the Dolores Canyon WSA as suitable for wilderness designation. After two very rewarding and interesting trips in the area I could not agree more with this recommendation.

82-1 (138) After reading over your evaluations of the wilderness qualities and charactoristics found in Chapter 2 of the EIS pgs 2-45 to 2-56 and chapter 2 in the Wilderness Technical Supplement I cannot understand a nonsuitable recommendation for the other 7 WSA's. All seven areas meet the criteria for wilderness study areas and all contain outstanding supplemental values. Resource conflicts, I presume, must be the reason

82-1 (138) for nonsuitability. Although the nonsuitable rational is never very clearly spelled out. Your preferred alternative for most areas would attempt to resolve possible conflicts with wilderness and preserve wilderness charactoristics. I would like to point out that while the managment ideas and prescriptions you suggest are quite good overall they are not permanent. They can change with times and political whims. Wilderness designation is permanent.

For example, Cahone Canyon, Cross Canyon, and Squaw/Papoose Canyon would be managed for cultural resources primarily. Other uses not incompatible to wilderness, such as wildlife management and grazing would continue. The area would be closed to ORV use and leased only with no surface occupancy or by directional drilling. Cross and Cahone would be open to mineral entry but neither have high potential (pgs 2-4 technical supplement). I am puzzled by the nonsuitablility recommendation.

The Preferred Alternative for Menefee Mountain, includes emphasis on non motorized recreation and wildlife values. Also recommended are no oil and gas leasing and no coal leasing. This management is very compatible with wilderness designation. The recommendation should be changed on this area in light of it's merits as a WSA and it's lack of conflicts.

82-1 (138) Tabeguache Creek has outstanding archeological resources, riparian habitat and wildlife habitat with no preFLPMA leases. The area is qualified in every way for wilderness designation, however once again there is a nonsuitable recommendation. These examples are also typical of Weber Mt. and McKenna Peak WSA's. There seems to be a willingness to preserve and protect the wild resources, the archeological resources and the primitive recreation, but an unwillingness to preserve them by wilderness designation. Almost all of the uses the BLM has listed as preferred uses are compatible with wilderness. The reluctance or refusal to recom-

mend these WSA's as suitable should change drastically in the FEIS. At the least the final recommendation should include the areas in the Ecological Representation Subalternative.

Appendix 6 of the EIS, best management practices list numerous management constraints which deserve to be complemented. In particular I like the managment practices pertaining to threatened and endangered species, wilderness and riparian habitat.

82-2 (80,103) The recommendations pertaining to grazing, O and G leasing, salinity reduction and ORV use vary very little between alternatives. As example, 68% of the total acerage for oil and gas in the preferred, 65% in the resource conservation and 70% in the resource utilization, is the range of alternatives. The case is similer in the other above mentioned resource aspects. To arrive at a balanced use program the range of alternatives should be broader. Management for these resources seems to be set and these alternatives are simple formality.

One large difference between the Preferred and the Conservation alternatives is in riparian habitat managment. Long term positive impacts on 249 miles could be realized in the Conservation alternative with only 94 miles in the Preferred. Since most wildlife, recreation and T and E habitat exist in and around rivers and streams, the conservation alternative in this aspect is best.

The Resource Conservation Alternative is the most well balanced. Without significantly reducing the availability of oil and gas resources and minerals and coal, the availability and preservation of other resources such as wildlife, culture, wilderness and recreation could be enhanced. In reference to the overall socio economical impact of

82-3 (17) the Resource Conservation Alternative, (pg v EIS) "no significant socio economic impact in the planning area would occur due to only minor changes in the existing situation," I find this statement confusing and it should be clarified. Apparently the prediction is no significant socio ecconomical impact due to this alternative, which

reinforces the desireability of the alternative.

82-1 (138) Another point which confuses me is the statement at the bottom of pg IV EIS. "Due to designating all eight WSA's there could be potential adverse impacts to cultural resources due to increased visitor use." Wilderness designation would provide protection by restricting access to motorized traffic, ending ORV use, eliminating destructive activities such as mining, logging and water storage. An increase in foot traffic and visitors could not possibly have a greater adverse impact.

I am glad to have had the opportunity to visit places in the Resource Area and comment on the management of the area. The planning process is a very necessary and vital part of good land use. I hope you can clarify some of my questions and I look forward to your final recommendations. Thank You.

Sincerely,
Paul T Petersen

Paul T Petersen
2888 Durango Dr
Grand Jct CO 81503

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Bureau of Land Management

JUL 30 1984

Durango, Colorado

83

18501 Co. Rd. J
Cortez, Colo. 81321
July 25, 1984

Area Manager, San Juan Resource Area
Bureau of Land Management Room 102 Feueral Building
Durango, Colo. 81301

Dear Sir;

As an elected member of the Montrose District Bureau of Land Management Grazing Advisory Board I feel that the recommended cuts in A.U.M.'s on the preferred alternative are far in excess. I feel the actual use in A.U.M.'s and present estimated capacity in A.U.M.'s should be the same and the potential capacity in A.U.M.'s for every allotment should be a substantial increase. I believe without exception if enough land treatment and proper forages are established on the land it is not only possible but very probable that more A.U.M.'s would be available. **83-1 (102)**

Grazing is only one of the uses under the multiple-use concept and it wouldn't be just to the individual ranchers, local communities, counties, state, or our nation to let a single use like recreation take over our federal lands. I feel if the only use was recreation there wouldn't be any need for B.L.M. employees. All the people would need is a simple statement: "It's your land. Recreate at your will." A statement I once heard spells it out. "When a tourist comes to town he has a white shirt and a ten dollar bill in his pocket and he doesn't change either while he's here." **83-2 (123)**

In conclusion, let's at least maintain our A.U.M.'s and stay with the multiple-use concept.

Sincerely,

Bruce V. Miller

84

P. O. Box 4
Hesperus, Colorado 81326
July 27, 1984

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Bureau of Land Management

JUL 30 1984

Durango, Colorado

David Miller--Area Manager
San Juan Resource Area, BLM
Federal Building
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller:

Thank you for the opprotunity to comment on the San Juan/San Miguel Resource Management Plan and EIS.

COAL From the information on coal and coal leasing supplied in the draft document and the Coal Unsuitability Report referenced there, it is nearly impossible to form any comments. Few of the figures and amounts agree. The information is so general as to be nearly useless.

I will list and later comment on some of these.

11 "An estimated 46,000 acres (1.5 billion tons) of the Durango known Recoverable Coal Resource Area (KRCRA ...would be available for leasing."
1-10 DKRCRA 143,780 acres
Reference made to assessment report available in the San Juan Resource Area Office.
Unsuitable for mining, 2,120 acres of surface mineable coal represents less than 1.4% of DKRCRA.
1-11 Acres Suitable for mining 48,050 DKRCRA
2-4 DKRCRA 143,780 acres, approximately 5% (300 million tons) of area is mineable by surface and underground methods, the remaining 95% (5Billion tons) is mineable only by underground methods.
2-6 Call for resourse information made in early 1983 and expressions indicated.
"demand for coal can be expected to increase once leasing begins"
3-56 46,000acres 1.5 billion tons
3-64 "Since most mining here will be underground"
Appendices Table of Contents--Coal Stipulations 4-B-8
5-20 Preferred minerals--"These priority areas were determined based on 1983 coal data and indications of interest by industry.

Page 2 Scott comments

Coal Unsuitability Report date May 17, 1984 I was shown on July 27, 1984 at the Durango Office states on Page 2 that only four percent of the Durango KRCRA contains coal suitable for surface (strip) recovery. Approximately eleven percent may be recovered by surface or underground methods; the remaining eighty-five percent is only suitable for recovery by underground methods.

On the same page higher up under Durango Coal Area, it states "of the total acreage assessed for surface mining 13,400 acres or 9 percent of the total area has been found unsuitable" also "10,440 acres...unsuitable for all methods of mining". The maps, 1 through 4, in the report show that the remaining acreage of the total 143,050 acres of the DKRCRA will all be suitable for surface mining and extraction..

84-1 (67) 11, 1-11, 3-56
Are 46,000 acres or 48,050 acres of the DKRCRA available for leasing?

84-2 (68) 1-10
If the 2,120 acres unsuitable for mining by surface owner preference represent 1.4 percent of DKRCRA, what happened to surface owner preference letters and investigation for the remaining 3.6 percent 2-4 or 13.4% or the majority of the 143780 acres of stripable coal referenced in the Unsuitability report?

84-3 (69) 2-4
Where are the 5% of the area mineable by surface and underground methods? These should be mapped so that the commenting public and surface owners are aware of potential surface impacts.

Are any of this 5% included in the approximately 46,000 acres to be considered for leasing?. All surface mining and subsidance and disturbance areas should be shown.

These figures do not agree with the Coal Unsuitability report.

84-4 (70) 2-6
Of the expressions indicated, did the expressions include the total estimated 46,000 acres identified?

Demand expected to increase--Is it the purpose of BLM or is it in the best interest ofthe public and the United States to have BLM create a demand for coal here when millions of tons of Federal Coal is already leased at give away prices in other parts of the West? With a depressed market in the coal industry should the total 46,000 acre unit even be considered for leasing; or only part of it?

84-5 (71) 3-64
What percent here will be surface mining and what is the location of these lands to be surface mined? There may have been no contact with surface owners here.

Page 3 Scott comments

84-6 (72) Subsidence and potential surface and underground water and aquifer disturbance on private surface ownership need addressing on the total Durango KRCRA. Other impacts to surface owners should be covered if this is truly an attempt at an EIS.

Appendices
Table of Content

84-7 (73) Coal Stipulations 4-B-8 There is no appendix for this listing. What protections are afforded surface owners? List them. Surface stipulations and aquifer and water protections on private surface need to be addressed in the RMP AND EIS.

5-20 Statement listed above

84-8 (67, 70) This statement appears to be inconflict with 2-6 which states "demand for coal can be expected to increase once leasing begins." Is BLM in fact creating a demand for coal by putting the 46,000 acres up for lease.

COAL UNSUITABILITY REPORT
The figures for DKRCRA do not even agree in this document, let alone with the UR. With all of these figures and conflicts, BLM cannot be in compliance to the unsuitability criteria of surface owner preference.

What is going on here? It would be futile to draw any conclusions or develop further comments until BLM corrects, determines, and quantifies the true figures and details, and totals on Coal and the Durango KRCRA

Land Ownership Adjustment.
Blm is in order and prudent to realize the management problems and future costs of retaining the isolated 40, 80, and 120 acre tracts with no legal access. BLM time in the future would be best spent by selling these tracts and devoting the staff time and money which the isolated tracts would have required to the large blocks of BLM land and multiple uses required of this RMP. 2.2% the land in question, would require much more than 2.2% of the time to manage.

Wilderness
2-51-2 Monefee Mtn and 2-54 Weber Mtn.
BLM is correct in determining a Non-wilderness classification for these two Wilderness Study Areas. Management of these two areas would be nearly impossible with the conflicts which already exist. The proximity of the DKRCRA to these two areas would negate the wilderness value even more.

Designation as Wilderness would cause greater harm to the archeological sites in these areas by drawing national attention to their location and availability. BLM would need full time staff and supervision to protect the locations.

84-9 (150) In any wilderness area created under this plan, any private inholdings should be acquired only on a willing seller basis and condemnation and eminent domain should not be used at any time.

Page 4 Scott Comments

Forest Management

Forest management on isolated tracts in the Hesperus area is desireable but may be somewhat hard to do because of inaccessability to the tracts and lack of roads to these locations.

Topography limits access from the North and the Ute Mountain Ute Indian lands to the South create access problems.

Pine Beetle infestation presently requires prompt attention.

Sincerely
Jack W. Scott

85

SOUTHWESTERN COLORADO LIVESTOCK ASSOCIATION

18501 Co. Rd. J
Cortez, Colo. 81321
July 25, 1984

RECEIVED
Bureau of Land Management
JUL 30 1984
Durango, Colorado

Area Manager, San Juan Resource Area
Bureau of Land Management Room 102 Federal Building
701 Camino del Rio
Durango, Colo. 81301

Dear Sir;

The Southwestern Colorado Livestock Association, representing 152 members, objects strenuously to the proposed grazing cuts in the Draft Resource Management Plan and Environmental Impact statement for the SanJuan - San Miquel planning area. We feel a more thorough study by several range specialists would result in a quite different estimated carrying capacity and we recommend that column be dropped from the study. 85 (104)

At this time, other federal government agencies are examining all possible avenues to lessen the financial stress on agriculture and 33 - 45% reduction in A.U.M' seems at cross purposes to these efforts.

We concur with your non-wilderness recommendations, preferring the multiple-use concept on government land.

Thank you for your attention to this protest to proposed reduction in grazing on the B.L.M. lands of the San Juan Resource Area. Our ranchers depend on and care for these permits.

Sincerely,
Board of Directors
Southwestern Colorado
Livestock Association

86

La Plata County
Open Space Committee
c/o Dr. Gary Ruggera, Chairman
P.O. Box 1724
Durango, Colorado 81301

RECEIVED
Bureau of Land Management
JUL 30 1984
Durango, Colorado

July 20, 1984

Mr. David J. Miller
Area Manager, San Juan Resource Area
Bureau of Land Management
Federal Building - Room 102
701 Camino Del Rio
Durango, Colorado 81301

Dear Mr. Miller:

We are writing to you as members of the La Plata County Open Space Committee to comment on the Draft San Juan/San Miguel Resource Management Plan/Environmental Impact Statement. Specifically, in regard to land disposal, we believe the area surrounding Rules Hill should be retained by the Bureau of Land Management, This parcel of land is the 120 acreas designated "H", "Public Land Disposal", in Township 36 North, Range 7 West, Section 13 under the Preferred Alternative. According to our maps this area affords desireable scenic views and significant wildlife habitat. It is also accessible from a county road and so contributes a tangible public benefit. Thank you for your consideration on this matter. 86 (18)

We believe there are additional BLM lands that have been identified for disposal that would have significant value for wildlife habitat and scenic views. We were unable to examine all the parcels of lands proposed for disposal and, therefore, would hope we would be given the opportunity to examine them on a case by case basis when they come up for disposal.

Again, thank you for your consideration on both of these requests.

Sincerely,
Gary Ruggera
Dr. Gary Ruggera,
On behalf of the La Plata County Open Space Committee

GR/jms

87

RECEIVED
Bureau of Land Management
JUL 30 1984
Durango, Colorado

July 25, 1984

Dear Area Manager -

The recommendations for wilderness in the San Juan / San Miguel Resource Management Plan (one out of eight Wilderness Study Areas) are not good enough! The other seven contain the richest archeological areas in America and some of the best wildlife habitat in Colorado. Colorado is known, world-wide actually, for its Anasazi ruins and some of the largest herds of elk, deer and other animals in the United States. Recreational value and multiple use of this land is extremely valuable as well as its pristine characteristics. 87 (138)

All of the land in Colorado is valuable, in some way, to the people and animals who reside here. Not necessarily in terms of monetary value, but spiritual value. Everyone and everything can use a little bit of space and solitude at some time or the other.

Please reconsider your proposals for wilderness in the San Juan/San Miguel Resource area of Colorado.

Sincerely,

Mary S. Eaton
Denver, CO.

Chris Seitz
124 S. Hilldale Rd.
Salina, KS 67401

88

Salina, Kansas
July 25, 1984

RECEIVED
Bureau of Land Management

JUL 30 1984

Durango, Colorado

Area Manager
San Juan Resource Area
Bureau of Land Management
701 Camino del Rio
Durango, Colorado 81301

Dear Sir:

The following are my comments concerning recently released recommendations of BLM on wilderness study areas of the San Juan/San Miguel Resource Management Plan and Environmental Impact Statement.

88-1 (124,133) In general, I would like to point out that this plan, in my opinion, should include some alternatives for achieving range improvement. At the present time, between one third and one quarter of this one-million-acre area is in poor condition; this is too high a proportion for this level. Also, BLM should provide at least one alternative that would provide a much greater degree of restriction of ORV use. At present, the lowest figure in the plan is for 79 percent of all land in the area to be open to this destructive form of recreation--much too high a minimum.

I fully support the recommendation of the Dolores River Canyon WSA for wilderness designation; however, I must add that this would be much enhanced by the addition of both Nyswonger Mesa and the upper three miles of Coyote Wash. By including these in the area, BLM could add substantially to the ecological and geological diversity of this wildland.

88-2 (138) On the other hand, I hope BLM will reconsider its decision concerning Cross, Cahone and Squaw/Papoose Canyons. I am in support of the designation as an Area of Critical Environmental Concern for the 156,000 acres west of Cortez, but this important action does not diminish the need for wilderness designation for the above areas. Although the archeological resources of these areas alone would be an important factor in favor of designation, wilderness status would ensure that a portion of the sagebrush ecosystem of the Great Basin would be included in the wilderness system, thus adding to its overall diversity. Given these factors, it's difficult to understand how these areas could have been overlooked for designation. Although they do contain deposits of some key minerals, this is apparently not a factor as BLM intends to prohibit mineral leasing.

The many wilderness features of McKenna Peak make this WSA, too, an obvious area for inclusion in the wilderness system. Its outstanding scenery, its herd of wild horses, its zone

of transition from saltbush-greasewood to Douglas fir and its fossils could all be valuable resources for future users of this area if it received wilderness designation. In addition, the area's importance as winter range for wildlife should be taken more fully into consideration.

88-2 (138) The small fraction of Tabeguache Creek recommended, not for wilderness, but for an administrative natural area is not sufficient for protection of an area that includes unroaded drainage of the Uncompahgre Plateau that provides an uninterrupted transition from semi-arid desert through subalpine forests. This area would make a rich educational resource, in addition to its other wilderness features.

Regarding Weber and Menefee Mountains, BLM proposes to prohibit various activities--ORV use, mineral leasing--that would be detrimental to these areas' wilderness qualities, yet it withholds wilderness designation. This, too, is difficult to fathom, especially in light of the fact that their varied wildlife and semiprimitive recreation features would be emphasized under this plan. Surely all of these factors would point to wilderness designation, rather than administrative procedures that could be changed at any time.

In closing, I would like to say that it is indeed shocking to see such large portions of the American people's priceless wild heritage passed by as unsuitable for preservation for future generations. As BLM's own studies have pointed out, these areas contain "nationally significant unique combinations of ecological and supplemental values"; they truly do belong to the American people of both the present and the future, and as such must be dealt with cautiously and meticulously. These irreplaceable lands can easily be disposed of within the space of a single generation, yet their treasure can never be fully reinstated, no matter what changes there may be in future policies and programs. Land, and especially wilderness land, will be at an even higher premium in the future than it is today. Where there is any doubt, it would surely be better to preserve, rather destroy, these precious lands.

Sincerely,
Chris Seitz

(Ms.) Chris Seitz
124 South Hilldale Road
Salina, Kansas 67401
913-827-1705

89

RECEIVED
Bureau of Land Management

JUL 30 1984

Durango, Colorado

Box 117
Cortez, CO 81321
26 July, 1984

BLM
701 Camino del Rio
Durango, CO 81301

Dave Miller:

89 (138) As an avid hiker of this area, I always look forward to venturing into an unknown canyon or mountain. Admitted, the BLM land to the west of Cortez is beautiful, but I'm often disappointed when I see the land overgrazed, the archaeological resources vandalized and destroyed, and roads or dirt bike trails running everywhere. Consequently I feel that all eight Wilderness Study areas should have been designated Wilderness ~~Study~~ primarily because they comprise a very small portion of the million acres of BLM land to the west of Cortez. Furthermore, they are the remaining few areas which have not been ravaged by roads leading to oil pads. I'm disappointed that only one area is being considered and recommended as potential wilderness.

As a former BLM employee, I realize that funding is not always there but with the advent of the Anasazi Heritage Center, why not do a little more to help preserve the wealth of beauty to the west of Cortez?

Sincerely,
Louise J. Stiver

90

WILLIAM E. BRAY — 7K/ — RANGE SHEEP AND CATTLE

"BILL"

PHONE NORWOOD 327-4427
REDVALE, COLORADO 81431

July 24, 1984

RECEIVED
Bureau of Land Management

JUL 30 1984

Durango, Colorado

Area Manager, San Juan Resource Area
Bureau of Land Management
Room 102, Federal Building
701 Camino del Rio,
Durango, Colorado 81301

Dear Sir:

I wish to comment on San Juan, San Miguel Resource Management plan and enviornmental impact statement. I believe this plan was well studied and prepared. It seems special interest groups always have tendency to influence public officials to make decisions in their favor regardless of the overall good for nation as whole.

In the past commercial groups such as miners, timber concerns, livestock, oil and gas have been considered such groups. Now the wilderness or so-called conservation groups have become the most vicious groups. They have the largest supply of money and personnel to lobby officials in their favor regardless of overall effect on an area. I feel it is unfortunate that the B.L.M. felt they could not recommend the Resource Utilization Alternate as the Preferred Alternate.

90 (138)

It seems wrong that the West cannot make the best use of their resources. The Preferred Alternate seems a compromise but the cost of maintaining one wild horse area at the expense of more desirable improvements is wrong. The maintenance of natural areas for people to use and observe is good but to declare them wilderness is absurd. True conservation requires wise management and cannot be properly carried on when wilderness designation is made. The Bare Two studies of a few years ago that segregated certain areas as roadless area has encouraged the destruction of jeep trails either closing them off or grading them into roads. I think this is wrong. The making of Dolores Canyon a wilderness area will someday come to haunt us as we need to get rid of salt and poluting springs; gas, oil, or mineral corridors should be kept available, also electric corridors. should not be limited by wilderness designation. Leaving Dolores Canyon as possible multiple use area would not detract from its recreational use.

The San Miguel area is badly in need of more irrigation water; and is finding themselves limited because of wilderness designation in another area.

I hope the B.L.M. officials will hold to their recommendations and not be swayed by wilderness groups threats of lawsuits to change their recommendations.

Sincerely yours,
William E. Bray
William E. Bray

91

Cortez, Colo
July 27, 1984

RECEIVED
Bureau of Land Management

JUL 30 1984

Durango, Colorado

Area Manager
San Juan Resource Area
Bureau of Land Management
Room 102, Federal Building
701 Camino del Rio Durango, Colo 81301

Dear Sir:

I am a livestock grazing permittee on B.L.M. land in the McElmo area I am in favor of utilizing all the resources in a reasonble manner with due care & Conservation taken, to protect the land & unusual conditions where possible & feasible.

I am not in favor of reducing grazing on the allotments, only when it is found to be absolutely necessary.

I am not in favor of changing the present grazing fee formula. When you consider all expenses & costs for labor, upkeep of range facilities, management, and the unpredictable range conditions from year to year, the grazing fee is already high enough

I think we already have enough designated wilderness areas, except make the lower Dolores river Canyon, & due to its inaccessibility, it pretty well takes care of itself

91 (138)

I think all the resources should be used in an orderly, reasonable manner and good conservation practices be applied or for as possible.

To do all this, considerable amount of money is needed and as it is all public land involved it should be financed by the public.

Funding should be sought to carry out these programs with special emphasis on spending the very most possible on actual Ground work, rather than administration

Sincerely Luther H. Miller

92

John R. Swanson
P. O. Box 913
Berkeley, CA 94701

RECEIVED
Bureau of Land Management

JUL 30 1984

Durango, Colorado

July 22, 1984

Bureau of Land Management
San Juan Resource Area
701 Camino del Rio
Durango, Colorado 81301

Dear Sirs,

Please accept my comments as follows, concerning the San Juan-San Miguel planning area draft Resource Management Plan and Environmental Impact Statement.

I have been acquainted with the area of Colorado for some fifty years, and for many decades have enjoyed the low impact recreational resources and abundant wildlife, cattle, and wilderness resources of Western National Forests.

On this short visit to Utah and as an environmental tourist, I am touring refuges for Mom and Pop wildlife in their undeveloped natural state.

After the last hour's long winded Draft Plan and EIS recital, I realize more appropriate features of the land than Public lands must accordingly be considered as a rating for mineral Resources exploitation yields.

I hope that Each unit of our Public lands be managed as a per moment Resource with the purpose of the agencies that manage our Public lands - including our Bureau of Land Management - to Preserve the Wilderness, Recreation, Biological and Cultural resources of our Public lands.

So I do think, that Each Unit of our Public lands as a Resource to protect its systems, preserve water shed, soil and enhance wildlife - fish and their respective habitats, protect and promote biological diversity, restore - recover all that - damaged areas to their natural environmental condition, and to preserve, strengthen and expand Wilderness areas.

So fully agree that Wilderness is the foundation of all land and water resources With Wilderness preserved strengthened in any and appropriate - endangered the primary goal of all land and water planning and management.

I strongly agree that the other nations to be utilized as the per moment plan for Bureau of Land - San Miguel planning area is Alternative Resource - Wildlife and Wilderness. To preserve these areas for costs benefit Man, and all life, on this Earth.

I do not recommend that Each of the following areas - units acreage - receive per moment Wilderness classification - and to be added to our National Wilderness Preservation System:

- Colorado canyon 10,799 acres
- Cross canyon 17,931 acres
- Dolores River Canyon 43,367 acres
- Mee Canon Creek 28,911 acres
- Needles Mountains 9,109 acres
- Ryman-Papoose Canyon 19,238 acres
- Sheep Creek Basin 11,700 acres
- Sikes Mountain 22,8[illegible] acres
- West Needle Contiguous 6,032 acres
- Needle Creek 4,504 acres
- Shelter Creek 6,818 acres
- Serviceable Contiguous 2,399 acres

Plus, one additional 189,000 acres of Canyon lands and Mesa management areas located on Sheep Mountain - San Miguel planning area to be added as Wilderness.

And to establish by Congress the Hovenweep National Monument - National Park Service - of some 249,000 acres, Colorado and Utah. Some Wilderness of about 120,000 acres

To go more fully into all facets of my views and each one here developed must on all current - proposed and anticipated Wilderness.

To express our Patriotic hopes on all Public lands With no Disposal of any Public lands.

I do wish we have more National lands and waters, including Wilderness, we have America!

Sincerely,
John R. Swanson

92-1 (138)

92-2 (151)

93

3077 East Fourth Ave.
Durango,Colorado
28 July 1984

RECEIVED
Bureau of Land Management
JUL 31 1984
Durango, Colorado

Hearing Officer,
Bureau of Land Management
Room 102
Federal Building
701 Camino del Rio
Durango, Colorado 81301

Dear sir:

I was unable to attend the public hearings at which public comments on the proposed Resource Management Plan for the San Juan/San Miguel Planning Area were invited. I would like to submit my opinions on some aspects of the alternatives presented in the draft of April 1984. I can sympathize with the difficulties bureau personnel must face in reconciling the diverse interests that are involved in their managment decisions. I am pleased, therefore, that conservation of natural communities, protection of both game and non-game wildlife, and recreation have reasonable priorities in the preferred alternative. Nevertheless, I myself generally prefer the resource conservation alternative because it favors these uses somewhat more. The designation of several of the areas as wilderness would insure that they would remain roadless until redesignated. Lack of roads has effectively limited much human disturbance in these areas and could be counted on to continue to do so despite increased population in the future.

I am equally concerned, however, with the fate of the much larger areas that will be designated for multiple use. I feel that we should adopt a very conservative attitude in developing these areas. For example, I would suggest an appropriate schedule for development of the coal and gas resources would not exceed 0.01 percent of the total reserves per decade(10,000 years total). At this rate, which is comparable to the changes weathered during the transition from glacial to modern climates, recovery of the exploited areas could be accomplished with assurance that the integrity of the ecological and social communities would be maintained.

I am particularly concerned that the mountain shrub, riparian, and salt desert scrub types receive adequate protection from exploitation. I will discuss my reasons for protecting each of these in turn.

Mountain shrub:
As part of my teaching duties as an instructor of biology at Fort Lewis College, I have carried on some studies of this community type. My colleagues and I are impressed with the unusual diversity of shrubs that are found in this plant formation in southwest Colorado. We have identified 37 species of native shrubs that are significantly present in one or both of two stands on Mancos shale(24 spp.) and Pleistocene alluvium(31 spp.) respectively, near Durango. These seem to be representative of the mountain shrub type over a considerable part of La Plata and Montezuma counties. We do not know of shrub communities of comparable diversity anywhere else in the Rocky Mountain region, however. The mountain shrub type comprise 3 percent of the planning area. They are limited for the most part to steep slopes that are particularly subject to erosion when disturbed. We feel that these shrublands are possibly unique in character and thus deserve additional protection. The BLM has the opportunity to do so in the formulation of the management plan.

Riparian vegetation.
Because of the topography of the area, human influence on the riparian vegetation has been particularly intense. This is where much of the construction of highways, canals, railroads, and agricultural lands has occurred. Very limited in initial extent, the type is continuing to be reduced at an accelerated rate now. It is disproportionately important for many species of wildlife and should receive more attention in the plan. I have little specific knowledge of the parcels designated for disposal. If they include riparian habitats the bureau should consider this aspect before relinquishing control.

93-1 (85)

Salt desert shrub:
This type is particularly susceptible to intrusion by human activities. At the same time however, it supports a number of Sonoran reptiles and amphibians that reach their northern limits of distribution in the valleys characterized by this vegetation type. The management plan is vague on the specific management of the type. The plan should recommend practices that will minimize further destructive intrusions into this type and facilitate its revegetation where already damaged. The fauna are of particular interest to ecologists and biogeographers, myself included, because, in such circumstances, we can hope to identify the factors limiting their distributions. In connection with the herptile fauna, let me add that I am pleased that a small area continues to be set aside in the Hovenweep area as a research area. We in the Biology Dept. at Fort Lewis visit Yellowjacket Canyon routinely on field trips with several of our classes and would like to utilize that reserve for some more involved studies in the future. I am concerned however that the herptiles require a much larger area of suitable habitat to sustain their populations.

93-2 (86)

In summation then, I believe that all these types plus the sagebrush grassland and pinyon-juniper woodland merit further attention. None of them are adequately represented in existing national parks, wilderness areas, or monuments to protect significant stands from future destructive use. The BLM has an opportunity at this time to remedy this situation by recommending wilderness status for all or several of the WSA's. I enter my plea at this time to include all of the eight WSA's identified in the final recommendation to Congress.

Thank you for giving me this opportunity to register my views.

Sincerely,

Albert W. Spencer

94

RECEIVED
Bureau of Land Management
JUL 31 1984
Durango, Colorado

Dear Mr. Miller,

This letter is in regard to those areas in Colorado which have recently been considered by the BLM to be designated wilderness areas.

First of all congradulations to the BLM upon ~~designation~~ recommendation of 28,366 acres of the Dolores river canyon to wilderness status. I support your recommendation and believe it is an exellent start and an important step by the BLM in the right direction. However I would like to voice my opinion that the wilderness area should be extended up Coyote wash to the Utah border and that Wysonger Mesa should be included as this would diversify and enrich this wilderness area in a positive manner.

94-1 (139)

Regarding the other areas that were considered in the BLM's wilderness designation study, Tabeguache Creek, McKenna Peak, Cross, Cahone, Squaw/Papoose Canyons, Weber and Menefee mountains, I was dissapointed to hear these areas were not recommended for wilderness designation. After researching the reasoning behind these recommendations I was overwhelmed

94-2 (138)

with disbelief! In my opinion the reasons the BLM gives for not recommending these areas be designated wilderness areas are feeble, shortsighted and vague. It seems the BLM is observant enough to regard the resources of these areas as valuable and has no intention of issuing mineral and mining rights, however it seems clear that not designating these areas as wilderness is in reality a weak attempt at preserving our priceless archeological, ecological and asthetic environment. I am proud to live next to the largest wilderness area in Colorado but even the Weminuche wilderness, as awesome as it is, is limited in its availibility and heavily taxed by use. The Winter proves to make this majestic wonder-land almost totally inaccessible while the Spring and Autumn weather can make this area harsh to even the most experianced camper. The availibility of more wilderness areas will help to relieve the pressures put upon those that exist. Also the wilderness designation of

94-2
(138)

94-2
(138)

an area will protect that area as much as possible. These areas in question will provide an exellent alternative wilderness environment to serve the public and to protect the land. Colorado has so much to offer besides alpine geography, it has an enriched history and delicate ecological balance preserved in some of these areas, lets not lose our priceless desert wilderness! As far as management of these areas is concerned, why not designate them Wilderness areas? With no roads for ~~snowbikes~~ vandals to travel on wait managment be that much easier?

I urge you, please reconsider your recommendations for these areas in question. If such areas were located in Nebraska of Kansas they might very well be designated National Monuments or at the very least wilderness areas. I'm proud to live in Colorado perhaps the most beautiful state in the nation. Our tradition and reputation to preserve the quality of the land and protect the environment is highly valued by a multitude of people not just the residents here. Please, lets preserve the land so that our children's, children's, children can enjoy a priceless resource and be proud of our generation for being wise enough to realize the importance of wilderness areas for the present and for the future.

Sincerly

Jerry Dickerson

Jerry Dickerson
6380 CR 203
Ogo Co 81301

95

RECEIVED
Bureau of Land Management
JUL 31 1984
Durango, Colorado

Dear Dave and Bruce,

One last plea! You ~~have~~ begged for public comment throughout your entire planning process and by your own public admission (Advisory board in early last week) response has been overwhelmingly in favor of more than one wilderness recommendation. Now it is our turn to see how much public opinion really does mean to your office. If you really value public comment your only alternative is to recommend more wilderness (Weber, Menefee, Cross, Squaw Papoose?) The people who really care about the public land you manage are clearly in favor of this action.

Because the desire and need for wilderness land will only increase in the future, those generations 50, 100 or 200 years

down the line will regard those who see the need for ~~these~~ more wildlands now as intelligent and those who recommended more of the land they manage for wilderness as having great foresight and wisdom. Look to the future and you will know this to the truth. One last time, please help us!

Sincerely,
Steve Davis
Box 295
Mancos Co.
81328

96

RECEIVED
Bureau of Land Management
JUL 31 1984
Durango, Colorado

Dear Dave,

add one more letter on the
side of more wilderness.

my main concern here is
to [illegible] the future when
[illegible] of us will be around
[illegible] the resources of our
[illegible] earth.
[illegible] to help the future
[illegible] to not use up
[illegible] wilderness areas
to, it will be great to
set aside spots for their use.
I urge you in saving these
[illegible] the wilderness

-2-

designation. The Mancos
canyon between Weber & Menefee
mountains & enjoy their
unscenic looks. Hikers
there have a chance
between us. I should help
create the three small
pieces we have some
voice on. please help
our future [illegible]
by recommending [illegible]
Weber & Menefee [illegible]
wilderness areas.

thanks for your consideration,
Richard Chilley
Box 276
Mancos Co. 81328

97

RECEIVED
Bureau of Land Management
JUL 31 1984
Durango, Colorado

Jean McCulloch
2914 Aspen Drive
Durango, Colorado 81301

July 29, 1984

Mr. Dave Miller, Area Manager
San Juan Resource Area, BLM
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller:

97
(138)

I would like to take this opportunity to strongly urge you to consider wilderness designation for all eight of the BLM Wilderness Study Areas. The recommendation of only the Dolores River Canyon is totally inadequate.

The natural resources offered by these areas such as archeological sites, solitude, unique ecosystems, wildlife, geological structures and wild horse herds are non renewable resources deserving the greatest protection possible.

A recent article in the Cortez Sentinel offers the most compelling argument for wilderness designation for those areas with significant archeological sites. A rancher, thinking he was on private land, bulldozed the Beartooth Anasazi ruins, virtually destroying three Pueblo II and III sites. It was reported that 100-120 masonery ruins were destroyed, more than 200 rooms. If we must lose forever all archeological sites on private land, we must make the greatest effort to protect sites on public land. Only wilderness designation can accomplish that goal.

Thank you for this opportunity to express my opinions.

Sincerely,
Jean McCulloch
Jean McCulloch

RECEIVED
Bureau of Land Management
JUL 31 1984
Durango, Colorado

98

John Sisk
Box 1692
Juneau, AK
99802

7/27/84

Area Manager
San Juan Resource Area
U.S. Bureau of Land Management
Durango, CO 81301

Dear sir,

I'm writing with regard to the San Juan/San Miguel Resource Management Plan (RMP) and EIS. Please include this letter in the record of public comments on the draft plan and EIS.

Five years ago I accepted a job with the Montrose district of the BLM, and spent several seasons working on range management and the wilderness review. Upon reading the recently released RMP I decided that, for the record, it is most important not to respond to the document item by item, but rather to point out how BLM wilderness decisions have been made.

In 1979 the Carter administration budgeted substantial funds for one of the most ambitious undertakings in BLM history: the comprehensive national review of de facto wilderness lands. That inventory and evaluation was mandated in the Federal Land Policy and Management Act, and the administration hired a large number of well-trained permanent and temporary staff to carry out the task.

On the Montrose district the wilderness inventory crew consistently found that legally credible de facto wilderness tracts were both larger and more numerous than anyone had thought. But our recommendations were repeatedly discarded by the district staff. Entire roadless areas were dropped from consideration, and boundaries were hacked back to the smallest area possible. The reasons offered varied from naive to absurd. District Wilderness Coordinator Jon Sering hoped that by trimming all "fat" from the inventory he would have an ultimatly credible, defendable slate of wilderness candidates. Resource Director Beverly G. Miller was more hostile. I remember the day he stormed into our map room and began ranting about how we were wasting our time because the state office had long ago decided that Powderhorn and Dolores Canyon were to be the only BLM wilderness areas in Southwest Colorado. The wilderness inventory was just window dressing, he huffed, as the results were "pre-ordained." The incumbent District Manager, Marlyn Jones, was so busy working on his golf game one wondered if he had ever seen the land entrusted to his judgement.

The result of the inventory was a small slate of extremely high quality wilderness candidates. Unfortunately, it was all downhill from there. The Reagan administration nearly eliminated the BLM wilderness budget. Bob Burford took over the agency, giving the Joe Coors of the world the run of the public domain. BLM's bureaucratic war on wilderness was initiated, and lo and behold we see a wilderness recommendation just like B.G. Miller had prophesied. In all too typical a fashion, the BLM resource experts and the document itself acknowledge the wilderness attributes of each area, but the decisionmaker himself shuns them and adopts the

extreme anti-wilderness position identified in ignorance by a handful of BLM staff a decade ago now mostly retired and transferred. The only apparent conclusion is that BLM has not improved a bit from the days when it was dubbed "The Bureau of Livestock and Mining," or "The Bureau of Lost Meaning."

What has occurred? Critical resource decisions are being made according to the old misconceptions of past and present mining and livestock interests entrenched within the BLM. The agency is catering to the same special interests that have pushed BLM around for decades and chewed up our federal lands like wolves on a carcass. Sadly, the American people are the losers; the enduring wilderness resource promised us by the Wilderness Act and FLPMA is being pummelled and discarded by BLM decisionmakers who ignore even the recommendations of their own wilderness specialists.

98 (138)

There are three elements of hope for these Wilderness Study Areas. First, BLM should amend the RMP to recommend all the WSA's for wilderness designation. Second, the U.S. Congress must follow through and enact wilderness legislation to protect each of these areas. Finally, BLM should go back and re-examine the many deserving roadless lands erroneously dropped from the inventory, including entire new areas as well as additions to current wilderness study areas. For example, BLM should study virtually the entire southwest slope of the Uncompahgre Plateau, considering the closure of unobtrusive roads with special use permits to livestock permittees. This land is as wild as any, and Congress has established in legislation that closed roads are admissable if the area's natural character is not severely impaired.

With regard to the WSA's currently under consideration, BLM acknowledges the unique ecologic, archeaologic, historic, and recreational opportunities of each, then rejects them. These are the last wild remnants in a sea of land dominated by chaining, mining, oil rigs, roads, and stock ponds! And these lands are wild largely because they possess few conflicting, extractive resource values or are too inaccessible. To say the minerals industry needs Cross Canyon or Menefee Mountain is absurd. It is also foolish to trust BLM to protect wildland values without wilderness designation. The promises of one transient bureaucrat are too often shattered by his/her successor; BLM's record of voluntary preservation scores a fat zero to date! It is the agency's record of resource mismanagement that is so impressive!

With regard to other topics in the draft RMP, the most fragile and irreplaceable resource by far is the rich Anasazi archaeological resource. The Anasazi Cultural ACEC is an excellent step in the right direction. I recommend making archaeology a driving resource in the entire San Juan/San Miguel area.

Livestock grazing management on these lands is a fiasco. It is questionable whether anyone, including the ranchers, are really being helped. My year in the BLM Range Conservation program showed me that what BLM prints on paper has virtually no correlation with on the ground reality. The range riders, conservation officers, and wildlife biologists often do a diligent and commendable job, and often build the respect of local ranchers and landowners. But they have zero support or enforcement backup from the agency. As a result, life on the range goes on, for better or for worse, independent of BLM policy and verbage. About all I can recommend is that BLM decisionmakers shore up their spines a little; try to assist, communicate and play hardball

with the cowboys and make realistic progress in small steps instead of making plans and claims on paper only that never make it to the West End.

Thank you for the opportunity to comment on this RMP.

Sincerely,

John Sisk

John Sisk

100

1124 South Second St.
Montrose, Colorado 81401
July 27, 1984

RECEIVED
27 1984
Uncompahgre Basin Resource Area

Area Manager
Uncompahgre Resource Area
Bureau of Land Management
2505 South Townsend
Montrose, Colorado 81401

Dear Sir:

I am writing to make clear my comments on the Draft Resource Management Plan and Environmental Impact Statement for the San Juan-San Miguel planning area.

First, I request that my entire letter be published in both the Final Environmental Impact Statements for both the RMP and the legislative EIS for the Wilderness Resources. I make this request because I include specific rationale why specific Wilderness Study Areas (WSAs) should be recommended to Congress as suitable for Wilderness designation.

100-1 (138)

I agree entirely with BLM's recommendation of a 28,366 acre Dolores River Canyon Wilderness Area. There should be no question in anyone's mind that this area truly deserves Wilderness protection. However, as stated on page 1-9 of the Wilderness Technical Supplement, the BLM should acquire a public easement or acquire the land near Bedrock to protect the natural integrity of the Dolores River Canyon. The Bureau of Reclamation is proposing a series of salinity injection wells which would include this private land. To preserve this valuable land, and to protect the surrounding Wilderness values, BLM must acquire this land or acquire a scenic easement as recently occurred north of the Black Canyon of the Gunnison National Monument. A scenic easement would allow cattle grazing to continue but would provide long-term protection of the scenic beauty of the canyon. If the BLM chooses not to acquire this private land, or a scenic easement, I request the rationale be clearly stated in the Final EISs.

For the McKenna Peak WSA I recommend that BLM recommend 19,362 acres as suitable for Wilderness designation (Wilderness Manageability Alternative). McKenna Peak WSA is a one-of-a-kind natural landscape. It is an extremely spectacular badlands landscape that is an ecologic haven for deer, elk, mountain lion and wild horses. The area contains outstanding and diverse Wilderness values that cannot be found in any existing Wilderness area. There are no resource conflicts with other resources that could preclude Wilderness designation. The area does not have good mineral potential nor is it an area with oil and gas potential.

Grazing could continue if the area is designated as Wilderness. Soil and salinity control in this area would be extremely costly and the benefits would be slight. The area would be easily manageable as Wilderness and the area would provide outstanding recreation and solitude opportunities in spring and fall when many of the high country areas are closed by snow to most users. Your preferred alternative would destroy a National Treasure. Off-road vehicle use would increase the salinity problems you are trying to correct. Wilderness designation is clearly the most appropriate use of the land and its resources.

If you do not recommend the McKenna Peak WSA suitable for Wilderness designation, I request that you clearly state your rationale in both EISs.

For the Weber Mountain WSA I recommend that BLM recommend 5,362 acres as suitable for Wilderness designation (Wilderness Manageability Alternative). Weber Mountain WSA is an ecologic island which includes important wildlife habitat and several unexplored archeological sites. Although it is adjacent to Mesa Verde National Park, hikers and horseriders are not allowed in the backcountry. Thus, Weber Mountain offers opportunites that are presently not available in the existing Wilderness system. Your preferred alternative can be read as a defacto Wilderness; no ORVs, no coal leasing or oil and gas leasing. BLM may think that they can administratively protect the Wilderness Resource without Congressionally designating the area. A lesson should have been learned through the U.S. Forest Service. The reason for the Wilderness Act of 1964 is for the Forest Service's failure to administratively protect their wild areas Wilderness values over time. Try as you might, BLM, only Wilderness designation can give lasting protection of the outstanding Wilderness values of the Weber Mountain WSA. Your preferred alternative clearly leans towards Wilderness; without the Congressional label. Thus, it becomes most apparant, through your own Wilderness Technical Supplement, that Wilderness designation is clearly the most appropriate use of the land and its resources.

100-1 (138)

If you do not recommend the Weber Mountain WSA suitable for Wilderness designation, I request that you clearly state your rationale in both EISs.

For the Cross Canyon WSA I recommend that BLM recommend 12,698 acres as suitable for Wilderness designation (Wilderness Manageability Alternative). Cross Canyon stands alone for a unique blend of natural values and cultural mysteries associated with the Anasazi culture. The WSA contains habitat for deer, raptors, and mountain lion. But it is an area full of spiritual values. It is an area containing standing walled ruins, petroglyphs, pictographs, and even outlaw cabins. It contains a year-round stream inhabited by a minnow. Cottonwoods line the stream and stair-stepped pinyon/juniper covered slopes offer outstanding

opportunities for primitive recreation and solitude. It is an area which can be managed as Wilderness. If oil and gas wells are to be drilled, they should be drilled outside the WSA by slant drilling. Another alternative, and one that I request an answer by BLM, is the poseibility of individuals or companies with an oil and gas lease donating that lease for a tax deduction. They could give up a lease and insure the area stays natural, yet still gain a tax break. Cross Canyon is too unique and superlative an area to be lost to mineral exploration. The little amount of oil and gas (or uranium) that may be found in this area is far outweighed by the value of the area as Wilderness. The area is a manageable unit. Designation would protect the cultural values by prohibiting vehicle use and visitors would tend to "self-police" the area while hiking or horseriding and preventing or reducing pothunting. Wilderness designation is clearly the most appropriate use of the land and its resources. There are other areas with oil and gas potential; areas with even greater potential. But for Wilderness, Cross Canyon would fill a void. With the exception of Squaw/Papoose Canyon WSA, there is no other area that comes close to resembling the diversity, uniqueness, and values that exist within the Cross Canyon WSA. Cross Canyon is truly Wilderness, it just needs Congressional designation.

100-3 (74)

If you do not recommend the Cross Canyon WSA suitable for Wilderness designation, I request that you clearly state your rationale in both EISs.

For the Tabeguache Creek WSA I concur with your preferred alternative in the Draft EIS. But the only reason I support your recommendation is because of the mineral withdrawal for the canyon bottom. Without this withdrawal, I would support a 6,876 acre recommendation for Wilderness designation (Wilderness Manageability Alternative). In addition to your proposal as an Outstanding Natural Area, I recommend you acquire the private land in the canyon bottom, or a scenic easement (see my discussion for the Dolores River Canyon). What is your response?

100-2 (19)

In conclusion, I support the Ecological Representation Subalternative on page vi of the Draft EIS; with modifications as described above. Some clarification is needed. All eight WSAs are suitable for Wilderness designation. BLM states this on page 1-4 of the Wilderness Technical Supplement. A lot of public participation was involved during the BLM's Wilderness Inventory Process. These eight WSAs clearly, without any doubt, meet all the criteria for Wilderness designation. None of these areas were appealed during the inventory process. Thus the only criteria which prevents one of these WSAs from being recommended by BLM for Wilderness designation is the conflict with other resource values and uses. The recommendations that I have proposed minimize the impacts with other resources. In some cases,

there are no real conflicts with other resource uses. In McKenna Peak WSA, Tabeguache Creek WSA, and Weber Mountain WSA; the oil and gas leases are due to expire, there are no conflicts with other resources which could preclude Wilderness designation. I have proposed mitigation for the Cross Canyon WSA, and even in this area it is clear that the wilderness values far outweigh any other resource values.

So why is BLM reluctant to recommend these outstanding areas as Wilderness? They are not typical stereotypes of Wilderness. They lack the alpine meadows and lakes, the spruce forests and cool streams. But that is just one perception of Wilderness. Wilderness is land retaining its primeval character and influence where the earth and its community of life are untrammeled by man. Wilderness does not have to be an area set aside for people; especially not the recreationist. BLM's Wilderness Management Policy states:

> There are places and times within wilderness where unique values may require that recreation or visitor use activities be restricted or entirely prohibited in order to preserve an enduring resource of wilderness.

Thus, BLM recognizes that Wilderness and recreation are not one in the same. Recreation may or may not be permitted in a Wilderness Area. The importance of Wilderness is in preserving for present and future generations, the benefits of an enduring resource of Wilderness. These WSAs are of National significance. That alone should be reason enough to recommend Cross Canyon, Weber Mountain, McKenna Peak, and Dolores River Canyon as Wilderness. But thankfully, for the American public, all four areas are superlative examples of their representation ecologically. All four contain unique supplemental values, which combined with their outstanding solitude and primitive recreation values and pristine natural condition, rank on an equal par, if not greater than, the majority of Park Service, Fish and Wildlife Service and Forest Service areas presently included in the National Wilderness Preservation System.

The BLM Wilderness Study Policy states:

> The BLM will recommend for wilderness designation only those areas for which it has been determined .., that wilderness is the most appropriate use of the land and its resources. In

> addition, areas recommended as suitable for wilderness designation should possess wilderness values and multiple resource benefits capable of balancing the benefits of other resource values and uses which would be foregone due to wilderness designation.

In reviewing BLM's documentation (Intensive Inventory and the Wilderness Technical Supplement) it is clear that Cross Canyon, McKenna Peak, Weber Mountain, and Dolores River Canyon meet this statement in the study policy. The highest and best use of these areas is Wilderness designation. Congress is the ultimate decision maker. It is the task of BLM to make an objective and rationale recommendation to this legislative body.

Sincerely,

Brad Klarehn

RECEIVED
Bureau of Land Management
JUL 31 1984
Durango, Colorado

99

Tim Wilson
Box 776
Lewis, CO 81327
July 30, 1984

Dave Miller
Area Manager BLM
701 Camino Del Rio
Durango, CO 81301

Dear Sir:

In regard to public comment on management of public lands, I want to say I oppose any type of designation of wilderness areas.

These lands belong to the public and I think all attempts should be made to make them more accessable, what ever it takes - new roads or repairing old ones. The working public have to enjoy the wilderness when they can, and unlike those rich college kids can't spend a week or two walking around. Those claimed areas, every where should be opened up to mass firewood gathering, using the same type of system as the forest service. It's a damn shame just to let that wood set out there and rot.

I also oppose any more money going for archelogical protection. If you people wouldn't keep making such a big thing about it people would, after a while, take for granted it's a no-no, and just let it drop. Archeologists live off the fat of the government from the BLM to the state schools, and I think one hell of a lot of people are sick of supporting a dutch dogging by a fancy name. They're not fighting for the protection of the ruins but protection of their jobs, like they're some type of endangered species. From my personal experience, archelogists themselves are the biggest vandals of anyone.

I want to see all funding of excavations stopped, unless in the case of losing them. Preserving the ruins means leaving them as they are for use. It's a shame the way this Crow Canyon School is making a million dollars from ripping people off. The way I understand it was they squatted on BLM land. You guys didn't kick them off and now they're established. I'll tell you what I mean about being thieves, one night in Cortez I was in a restaurant and here was a groups of archelogists talking to a burger and they were bragging about how much stuff they were selling, how much stuff they were getting off BLM for free, and how they were too stupid to catch anyone. It's like having the fox guard the hen house - They're the only ones I know of who do any digging anymore. Why don't you clean house before trying to clean the yard. I think they're bigger a society, who consistently try to walk over people and push them around.

If I think if you're going to rent out that land for cattle and sheep, then it ought to be fenced all the way around, not just between the different leases, but next to the farmers fields also. They're just trying to stay in business and that should be their number one priority.

I think you're doing okay with energy development but it's kind of silly to pay a contractor to drag brush and trees back over a pipeline - makes easy work for the Indians I guess.

More roads, more firewood, way less archelogical harassment, + keep the oil companies in check.

Sincerely,
Tim Wilson

These are also my sentiments.
Mark Arthur Wilson

101

United States Department of Agriculture | Forest Service | San Juan National Forest | 701 Camino Del Rio Durango, CO 81301 303-247-4874

REPLY TO: 1950

DATE: JULY 28, 1984

SUBJECT: San Juan/San Miguel Resource Mgmt. Plan

TO: David J. Miller, Resource Area Manager

Dear Dave:

We have reviewed the draft San Juan/San Miguel Resource Management Plan and Environmental Impact Statement, and essentially have no areas of concern. The documents are well prepared and should guide future management of public lands under your management well.

One proposed management action discussed in your RMP that might affect the San Juan National Forest is the reduction of 33 percent in grazing use on BLM lands. Please work closely with us as you implement allotment management plans that will lead to grazing reductions, as the liklihood of additional demand being made on National Forest range resources is strong.

Congratulations on completing your Resource Management Plan, and good luck in implementing it.

Sincerely,

John R. Kirkpatrick,
Forest Supervisor

RECEIVED
Bureau of Land Management
AUG 01 1984
Durango, Colorado

102

July 31, 1984

RECEIVED
Bureau of Land Management
AUG 01 1984
Durango, Colorado

Mr. Dave Miller
Area Manager
Bureau of Land Management
701 Camino del Rio
Durango, CO 81301

Dear Mr. Miller:

I am opposed to any more wilderness area designations. I do not believe in careless destruction of the land or any natural resource. I feel there has to be proper management of an area for it to remain healthy.

If any of the supporters of wilderness areas attempted to develop a resource, such as oil or gas, on public lands, they would realize how strict the regulations are.

Man alive in harmony with the land. Each of us has to have enough pride and character to refrain from despoilment of our beautiful area. We shouldn't have to rely upon legislation.

Sincerely,

Cecil Gustin
Dolores, CO

103

PHILLIPS PETROLEUM COMPANY
DENVER, COLORADO 80237
8055 EAST TUFTS AVENUE PARKWAY

July 31, 1984

RECEIVED
Bureau of Land Management
AUG 01 1984
Durango, Colorado

Mr. Dave J. Miller, Area Manager
Bureau of Land Management
San Juan Resource Area
Room 102, Federal Building
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller:

We appreciate this opportunity to offer comments on the San Juan/San Miguel Resource Management Plan. These are in addition to comments made to Mr. Ed Singleton and Mr. Jerry Kendrick of your office on June 12. Concern regarding maintenance of mutiple use priorities has been a consistent orientation from which we have offered comments earlier. Consequently, when noting an Area of Critical Environmental Concern nomination within this Resource Management Area, it is with recognition of the concern for cultural values that prompts an increased interest in multiple use as a consideration with any administration and or managerial technique that would be applied due to the increased focus under such categorization.

The San Juan/San Miguel area has varied resources both in spatial extent and in degree of presence or quantity. To recognize and respond to such a varied responsibility of management of these resources requires, as demonstrated in this letter, a degree of priorities in management technique. It is toward this end that comments concerning geologic potential area are offered.

Technical advisement concerning drilling capability regarding directional drilling has been utilized in a manner that would indicate effort by the planning team toward appraising operational constraints of the oil and gas industry. For further delineation as to those conditions under which the industry must operate, a consideration of the economic factor is also required due to the constraints that topography, stipulations, etc., may place upon the industry, especially with the presence of resources other than oil and gas.

Recognition and response to the existence of cultural resources operations require, by design, a degree of ministering to these resources. The oil and gas industries' ability to operate within sensitive areas made so by the presence of various resources has been demonstrated in such areas as

the Bridger Lake Field in which Phillips operates in the Uinta Mountains of Utah. The oil and gas industry has an inherent ability to develop new techniques necessary to operate in sensitive environments. However, this technology cannot be applied if access has been foreclosed.

Since geologic experience, data, and theory now indicate potential for several areas within the scope of this plan, it is certainly conceivable that as the science of geology evolves to produce additional information and theories even the resource evaluation for these areas may change. With premature foreclosure of access, evaluating oil and gas is so encumbered that it would seem that the required management for these resources would likewise be so encumbered as opposed to more active management of those resources whose extent within the resource area was better known. To aid in the management of oil and gas we offer the geologic comment toward that end of hopefully encouraging further recognition that access, being within the context of prudent operation, as an important factor in enabling assessment, exploration, and development of oil and gas.

In terms of petroleum potential, the WSA's that Phillips Oil Company considers to be very favorable for significant hydrocarbon reserves are: Delores River Canyon/Coyote Wash (#030-290), McKenna Peak (#030-286), Cross Canyon (#030-265), Squaw/Paponse Canyon (#030-265A), and Cahone Canyon (#030-265D). The latter three areas have proven potential and need no further comment. Coyote Wash and McKenna lie within the prolific Paradox Basin. The subsurface and surface geology indicate that the conditions necessary for hydrocarbon accumulation are present. That is to say that our data indicates the presence of rocks that are capable of sourcing and storing oil and gas. In addition, structures of significant economical size have been identified in these areas. Therefore, it is our belief that these areas should not be put into wilderness classification or foreclosed due to prescriptions until such time as their oil and gas potential has been fully assessed. Oil and gas operations must be allowed on these lands if the petroleum resources are to be realized.

Again, thank you for the opportunity to offer these comments. If you have any questions or need further information please call (303-850-3268) or write to me at the above address.

Sincerely,

John P. Himebaugh
Associate Geologist

JPH/ljf

CMB4/784/01

AtlanticRichfieldCompany Government Relations
555 Seventeenth Street
Denver, Colorado 80202
Telephone 303 575 7577

Public Lands

104

July 27, 1984

RECEIVED
Bureau of Land Management
AUG 0 1 1984
Durango, Colorado

Mr. David J. Miller, Area Manager
San Juan Resource Area
Bureau of Land Management
102 Federal Building
701 Camino del Rio
Durango, CO 81301

Re: San Juan/San Miguel Draft RMP/EIS

Dear Mr. Miller:

Atlantic Richfield Company appreciates the opportunity to provide the Bureau of Land Management with our comments on the Draft Resource Management Plan and Environmental Impact Statement for the San Juan/San Miguel Resource Areas in southwest Colorado.

We believe BLM has done an excellent job of preparing a balanced proposed plan for the resource area. We support BLM's usage of Mineral Resource Emphasis Areas in the proposed plan. It is important for land management agencies to recognize and plan for energy and mineral resource activities within the resource area. We have found that in most cases, land management agencies do not give serious comprehensive consideration to subsurface resources during the planning process. Therefore, we are pleased to see that BLM has realized that it is possible to effect resolutions to resource conflicts during the planning process between subsurface and surface resource values through management emphasis areas. We believe it would be beneficial, however, to point out in the final EIS that energy and mineral activities are not limited to these emphasis areas, that these uses are compatible with other resource values and uses when proper measures are taken to mitigate adverse impacts.

104-1 (75)

As was demonstrated in the tour of the resource area held by BLM for members of the RMOGA Public Lands Subcommittee, it is possible to reconcile development activities, such as that to Shell's McElmo Dome CO_2 project, with sensitive cultural resource values. As a result, we believe that the decision not to lease certain areas within the resource area is

inappropriate in those areas which are considered to have high energy and mineral resource potential. ARCO has demonstrated its ability to mitigate adverse impacts to wildlife resources in our Sheep Mountain CO_2 project just east of the Sangre de Cristo Range. With the available technology demonstrated in the Shell and ARCO projects, we believe that sensitive surface resource values and development of subsurface resources can be made compatible with careful planning and cooperation between industry and the Bureau.

To expand further, we do not feel BLM is justified in recommending a no leasing classification for roadless areas which are not recommended for wilderness. We support BLM's nonwilderness recommendation for Cahone Canyon, Cross Canyon, McKenna Peak, Menefee Mountain, Squaw/Papoose Canyon, Tabguache Creek, and Weber Mountain. However, we believe the energy and mineral potential for the areas should not be foregone when it is possible to protect environmentally sensitive values through standard or special stipulations as provided for statutorily and through regulatory measures.

104-2 (76)

We are further concerned with the wilderness recommendation for the Dolores River Canyon WSA. This area has significant potential for not only oil and gas, but also hardrock minerals, such as uranium, vanadium and precious metals. BLM points out in the EIS that this WSA alone contains between 400-500 mining claims. Coupled with the preFLPMA leases existing within the area, it seems that a management conflict would arise should the area be designated wilderness. We feel that this area could be adequately managed through an ACEC designation.

104-3 (138)

We were at first concerned with BLM's proposal of a 156,000 acre ACEC. However, BLM's intention is to designate this area the Anasazi Cultural Multiple Use Area because it contains several significant resource values. We believe that this designation, as well as reasonable and carefully thought out stipulations on mineral activities, would provide sufficient protection to the varied resource values within the area. We endorse the concept of multiple use for all areas not statutorily withdrawn.

In conclusion, it appears that BLM did an exceptional job of trying to balance the various multiple uses within the San Juan/San Miguel Resource Area as outlined in the proposed Resource Management Plan. We urge BLM to make the modifications proposed above in order to more fully provide for energy and mineral exploration and development activities.

Sincerely,

C. M. Moseley

C. M. Moseley

105

Roberta Andersen
Public Lands Coordinator

Amoco Production Company
Denver Region
1670 Broadway
P.O. Box 800
Denver, Colorado 80201
303-830-4040

July 30, 1984

RECEIVED
Bureau of Land Management
AUG 0 1 1984
Durango, Colorado

Mr. Dave J. Miller
Bureau of Land Management
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller:

Thank you for the opportunity to comment on the San Juan/San Miguel draft RMP. Amoco Production Company is a subsidiary of Standard Oil Company (Indiana), and the company is interested in BLM's planning process for this area.

We especially appreciate the high-quality interim publications which kept us informed as the process evolved. The "bulletins" were not only informative, they were positive about management activities. As a logical extension, the draft RMP is positive, comprehensive and well written.

It is important to note that BLM has spent more than four years in this planning process to get to the draft document stage. Too often the timing is overlooked in favor of the "process." Somehow we must make planning more efficient.

105 (76)

BLM has established a sound management and development relationship with the Shell CO_2 operations in the resource area. With the same high-quality approach to management in Dolores River Canyon, we believe this highly-prospective area could also produce energy resources while providing so-called "back-country" recreation experience. Current technology and standard environmental-protection stipulations could also be used to lift the "no-lease" restrictions in Cross, Cahone, and Squaw/Papoose Canyons and Menafee and Weber Mountains.

Amoco believes that with proper management, it is unnecessary to lose the potential for 5.7 million barrels of oil, 3.9 million cubic feet of gas, and 46 billion cubic feet of CO_2 through leasing prohibitions.

Mr. Dave J. Miller
July 30, 1984

Page Two

Planning must result in rational conclusions. BLM obviously feels constrained by pressures to designate some number of acres "off-limits" to certain resource uses. We find that unreasonably limiting and an abrogation of professional responsibility in the interest of political expediency. Amoco supports a combination of management prescriptions which will provide BLM's resource professionals with maximum flexibility to accomplish management goals for this resource area consistent with national needs.

Sincerely,

Roberta Andersen

RA:yo

106

United States Department of the Interior
NATIONAL PARK SERVICE
ROCKY MOUNTAIN REGIONAL OFFICE
655 Parfet Street
P.O. Box 25287
Denver, Colorado 80225

RECEIVED
Bureau of Land Management
AUG 0 1 1984

IN REPLY REFER TO:
L7619 (RMR-PC)

JUL 84

Memorandum

Durango, Colorado

To: Area Manager, San Juan Resource Area, Bureau of Land Management, Durango, Colorado

From: Associate Regional Director, Planning and Resource Preservation, Rocky Mountain Region

Subject: Review of Draft Resource Management Plan and Environmental Impact Statement (RMP/EIS) for the San Juan-San Miguel Planning Area, Colorado (DES-84/15)

The National Park Service (NPS) has reviewed the subject RMP/EIS and offers the following comments.

106-1 (20) The RMP did not identify class I and class II clean air areas in the resource planning area. All such class I and class II areas within 100 kilometers of the resource planning area should be located and delineated on a map. The NPS reviews developments within 100 kilometers of class I or class II areas through EIS's or Prevention of Significant Deterioration (PSD) permit applications for their possible air pollution impacts on those areas.

106-2 (21) On page 3-1, the Bureau of Land Management (BLM) "assumes that no important impacts to climate, air quality, geology, * * * would result from BLM management actions." Also, page 3-1 of the wilderness technical supplement states that "climate, air quality, geology, forestry, the social environment, and topography of the planning area are resources * * * that would not be affected by any of the alternatives." Energy development would affect air quality and air quality related values (resources which are sensitive to air pollution). These effects should be addressed, particularly regarding class I areas such as Mesa Verde National Park.

106-3 (22) The western slopes of Menefee and Weber Mountains form important scenic vistas from Mesa Verde National Park. As Congress deliberated in 1905 over the establishment of Mesa Verde as a national park, it referred to these same vistas seen from the trail that at that time left the Mancos-Cortez highway. "This backbone or ridge is rolling in outline and from the highest hill over which the trail runs is one of the grandest and most extensive views in the country" (House Committee on Public Lands Report No. 3703, January 19, 1905, to accompany H.R. 15986). The RMP/EIS should recognize this value in the text for visual resources, page 2-45, and in Figure 2-9. Also, for each alternative, the environmental consequences section should recognize that the current forest/mountain/agricultural character of this viewshed for the park would be altered if an alternative is selected permitting energy/mineral development. Conversely, the document should recognize that such vista for the park would be protected under a wilderness or no surface occupancy classification.

106-4 (124) Additionally, the text does not specify more direct consequences that might occur on adjoining lands in the Weber Mountain area, such as Mesa Verde National Park and State lands. For example, lands adjacent to the park boundary presently not open to livestock grazing are proposed for such use. If this is done, the BLM would need to install and maintain fencing to separate these grazing areas from park lands.

106-5 (77) The RMP/EIS should also recognize that the proposed open pit coal mining operations east of Cortez would alter the agricultural and mountain vistas visible from several overlooks along Mesa Verde National Park's north rim. We recommend that the BLM consult with the U.S. Fish and Wildlife Service and the State of Colorado as to the effect such operations would have on winter range for deer and elk, and on feeding and hunting areas used by peregrine falcons, and bald and golden eagles. We are advised by the park staff that all of these animals migrate between the affected area and Mesa Verde National Park.

106-6 (23) We are pleased to note that page 4-1 recognizes the ongoing planning process for Hovenweep National Monument. However, as written, the RMP/EIS text treats the various units of Hovenweep National Monument no differently than any other lands adjacent to BLM lands. Provisions have not been made to consider potential impacts to the nationally significant prehistoric ruins protected by the monument, or to the visual setting of those ruins caused by grazing, energy exploration and extraction on nearby BLM lands. Rather, each of the four alternatives specifies grazing and mineral resource development on lands right up to the Hovenweep boundary. We suggest that the inclusion of a buffer zone around the monument's Hackberry, Holly, Cutthroat and Goodman Point units would mitigate many of these potential impacts, in the event that a general management plan for the monument does not advocate expansion.

106-7 (24) We note that the proposed management plan does not discuss any coordination with the Monticello, Utah, BLM area office on resource issues. Pipelines, seismic testing lines, stock driveways, and roads crossing the Colorado-Utah border come near Hovenweep National Monument units. These and other issues are of common interest among the NPS and the separate BLM offices. We suggest that to design and implement a comprehensive plan such as this most effectively, the RMP/EIS should at least footnote the relationship between the two State planning areas.

106-8 (25) If any wilderness areas were designated as proposed in the document, it would seem that resource management personnel would be needed for some of these areas, based on perceived assumptions in the document. Publicity surrounding the wilderness designation, together with the general trend of increased use of about 10 percent yearly, could necessitate more BLM employee hirings. We wonder whether the economical consequences discussion for each alternative reflects these needs.

106-9 (26) Two comments are offered concerning the graphics. No definition is given for the designation LES on areas displayed on the maps (Resource Conservation-West Half, for example). Also, it is sometimes difficult to relate the text on cultural resources (pages 2-39 to 2-44) to the maps in order to determine the location of cultural sites and to ascertain whether or not these sites are receiving protection.

106-10 (27) The discussion on page 2-34 recognizes the potential of the Dolores River as a unit of the Wild and Scenic Rivers System. The Domingues-Escalante Ruins and the Lowry Ruin National Historical Landmarks are also identified (page 2-40 and the maps). In addition, the document should identify the Animas River on public lands in San Juan County between Silverton and Ruby Creek as being on the Nationwide Rivers Inventory.

Rivers which have been included on the final Nationwide Rivers Inventory list have been selected after consideration of the degree to which the river is free flowing, the degree to which the river and corridor are undeveloped, and the outstanding natural and cultural resource characteristics of the river and its immediate environment. The Nationwide Rivers Inventory was completed for the purpose of identifying potential wild, scenic, and recreational rivers within the United States. We note that the Animas River in this area is under a powersite withdrawal. At the same time, however, the RMP/EIS notes that "all the Silverton area is currently under intensive grazing management and will be managed for its recreation values." Further, for all the alternatives, the public lands on either side of the river are emphasized for wilderness study, and under the Resource Conservation and Resource Utilization alternatives, more emphasis is placed on aquatic and riparian management. With these parameters, it does not appear that the various alternatives will have adverse impacts on the Animas River. However, its inclusion on the final Nationwide Rivers Inventory list should be taken into consideration during further project planning.

106-11 (28) The Animas River Valley is also identified as a potential national natural landmark. Other potential national natural landmarks are the San Miguella Fossil Area in San Miguel County, T44N, R11W, Section 24; and the Atkinsons's Mesa Uranium Field in Montrose County, T48N, R18W, Sections 9;13, E1/2; 14; 23, W1/2; and 24. National Natural Landmarks are so designated because of nationally significant ecological or geological features.

Only the preferred alternative in the RMP/EIS shows public lands in the San Miguella Fossil area as being retained under BLM administration. We are concerned that the potential landmark be given every opportunity for protection. The same applies to the Atkison's Mesa Uranium Field which is under a powersite withdrawal. Further information on the potential landmarks can be obtained from Ms. Carole Madison, at the above address, telephone (303) 234-6443.

Richard A. Strait

Colorado Wilderness Network

107

2239 East Colfax • Denver, Colorado 80206 • 573-7870

July 25, 1984

Mr. Dave Miller, Area Manager
San Juan Resource Area, BLM
Room 102, Federal Building
701 Camino del Rio
Durango, CO. 81301

RECEIVED
Bureau of Land Management
AUG 0 1 1984
Durango, Colorado

Dear Mr. Miller

Please inlcude our comments in the record of public review of the San Juan/San Miguel RMP/EIS and Wilderness Technical Supplement. The Colorado Wilderness Network (CWN) initiated the Colorado Adopt-a-BLM WSA program several years ago. At this time there are over 200 adopters; each of the WSAs contained in the San Juan/San Miguel RMP/EIS has been adopted by one or several individuals. Our comments are concentrated on the wilderness, grazing, and lands aspects of the RMP/EIS.

WILDERNESS

The wilderness recommendations contained in the San Juan/San Miguel RMP/EIS are insufficient and are not justified. In many cases BLM has ignored the aspect of diversity as specified in its Wilderness Study Policy and Planning Regulations. We also feel that the analysis contained in the RMP/EIS supports wilderness and that the conclusions of the BLM concerning wilderness are unwarranted.

The BLM has ignored the aspect of diversity as seen in several examples:

1) On page 3-27 the EIS states that "there is no potential wilderness within the Colorado Plateau Province which inlcudes the same combination of ecological and supplemental values" as are found in Cross, Cahone, and Squaw/Papoose WSAs.

107-1 (138)

2) On page 3-28 the EIS states that "the supplemental values of McKenna Peak WSA (containing a wild horse herd, fossils, geologic features, and winter wildlife habitat), in combination with its ecological community, would present a different and unique addition to the wilderness system."

3) On page 3-27 the EIS states that wilderness designation of four WSAs, i.e. Cross Canyon, Dolores River Canyon, McKenna Peak, and Weber Mountain "would add greatly to the diversity of the NWPS. Their contribution as wilderness resources are of local, regional, and national significance."

These examples illustrate the blatant inattention on the part of the BLM to the aspect of diversity when the BLM recommended only 1 out of 8 WSAs as wilderness.

As mentioned previously, BLM's wilderness recommendations are unwarranted based on the analysis contained in the RMP/EIS and Wilderness Technical Supplement (WTS). The following is a prime example:

Aiken Audubon Society • Arkansas Valley Audubon Society • Aspen Wilderness Workshop • Colorado Association For River Preservation • Colorado Mountain Club • Colorado Open Space Council • Colorado Trout Unlimited • CU Wilderness Study Group • Denver Alpine Club • Denver Audubon Society • Environmental Research Group • Friends of the Dolores River • Friends of the Earth • Gunnison Wilderness Society • High Country Citizens' Alliance • Public Lands Institute • San Juan Ecological Society • San Luis Valley Wilderness Coalition • Sierra Club • Southeast Colorado Wilderness Coalition • The Wilderness Society • Two Rivers Citizens Association • UNC Colorado Public Interest Research Group • Uncompahgre Audubon Society • Upper Arkansas Wilderness Coalition • Western Colorado Resource Council • Wilderness Workshop

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Colorado Wilderness Network

2239 East Colfax • Denver, Colorado 80206 • 573-7870

On page 1-19 the WTS state that both Tabeguache Creek and McKenna Peak WSAs are manageable as wilderness under all alternatives except for the No Wilderness Alternative. The WTS also comments on McKenna Peak's uniqueness with regard to ecosystem, and Tabeguache Creek's uniqueness as one of only a few pristine canyons along the Uncompahgre Plateau. Both areas have outstanding wilderness qualities as seen in the BLM Wilderness Inventory. It is therefore surprising that BLM's recommendations for these two areas is unsuitable for wilderness.

The CWN supports all 8 WSAs as suitable for wilderness designation.

107-2 (139)

Dolores River Canyon: The BLM is to be commended for its wilderness recommendation for Dolores River Canyon. However, several boundary adjustments should be incorporated to include Nyswonger Mesa, Skein Mesa, and Coyote Wash to the Utah state line. (Please see report compiled by the University of Colorado Wilderness Study Group and submitted to your office in August 1981 for further details on thes boundaries).

107-1 (138)

Cross, Cahone, Squaw/Papoose Canyons: These areas contain incredible archeological resources, as many as 100 sites per square mile! The areas also exhibit diversity as there is no representation of the Great Basin sagebrush ecosystem in the entire NWPS. Since the BLM plans to place the canyons off-limits to mineral leasing there are no real resource conflicts. Wilderness designation would provide the easiest type of manageability for the BLM as well as protect the precious archeological resources.

Weber and Menefee Mountains: These areas which are adjacent to Mesa Verde Natioanl Park would provide a natural buffer to the Park. BLM proposes no mineral leasing, no ORV use, and recognizes the importance of the wildlife habitat found in these areas. Therefore,there is no real reason not to recommend these areas as wilderness.

Tabeguache Creek: Tabeguache Creek is a wonderful area for recreation and also contains a variety of geological, educational, scientific, and archeological values. It is one of the few unroaded, pristine canyons of the Uncompahgre Plateau. The proposed 560 acre natural area is not adequate to protect this area.

McKenna Peak: This unique area would not only add diversity to the NWPS, but also consists of important wildlife winter range, numerous fossils, a wildhorse herd, and spectacular scenery.

Aiken Audubon Society • Arkansas Valley Audubon Society • Aspen Wilderness Workshop • Colorado Association For River Preservation • Colorado Mountain Club • Colorado Open Space Council • Colorado Trout Unlimited • CU Wilderness Study Group • Denver Alpine Club • Denver Audubon Society • Environmental Research Group • Friends of the Dolores River • Friends of the Earth • Gunnison Wilderness Society • High Country Citizens' Alliance • Public Lands Institute • San Juan Ecological Society • San Luis Valley Wilderness Coalition • Sierra Club • Southeast Colorado Wilderness Coalition • The Wilderness Society • Two Rivers Citizens Association • UNC Colorado Public Interest Research Group • Uncompahgre Audubon Society • Upper Arkansas Wilderness Coalition • Western Colorado Resource Council • Wilderness Workshop

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GRAZING

It is disappointing to see that this plan provides no alternative for improving the range condition of the public lands. All four of the alternatives result in 27-36% of the range still in poor condition. This is no real improvement since the current condition of the range is 39% poor. The plan should provide some alternative which would provide a significant improvement in the condition of our public rangelands.

107-3 (103)

LANDS

The CWN has never been comfortable with the idea of Lands Disposal. The BLM should opt for exchange of lands only, and not sale of lands. Also, the BLM did not adequately consider the acquisition of lands in this RMP/EIS.

107-4 (10)

We appreciate this opportunity to comment on the San Juan/San Miguel RMP/EIS and Wilderness Technical Supplement.

Sincerely,
Sharyl A. Kinnear
Sharyl A. Kinnear
Coordinator, Adopt-a-BLM WSA Program

2448 I Road
Grand Junction, CO. 81505

Aiken Audubon Society • Arkansas Valley Audubon Society • Aspen Wilderness Workshop • Colorado Association For River Preservation • Colorado Mountain Club • Colorado Open Space Council • Colorado Trout Unlimited • CU Wilderness Study Group • Denver Alpine Club • Denver Audubon Society • Environmental Research Group • Friends of the Dolores River • Friends of the Earth • Gunnison Wilderness Society • High Country Citizens' Alliance • Public Lands Institute • San Juan Ecological Society • San Luis Valley Wilderness Coalition • Sierra Club • Southeast Colorado Wilderness Coalition • The Wilderness Society • Two Rivers Citizens Association • UNC Colorado Public Interest Research Group • Uncompahgre Audubon Society • Upper Arkansas Wilderness Coalition • Western Colorado Resource Council • Wilderness Workshop

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108

United States Department of the Interior
BUREAU OF RECLAMATION
UPPER COLORADO REGION
DURANGO PROJECTS OFFICE
P.O. BOX 640
DURANGO, COLORADO 81301

RECEIVED
Bureau of Land Management
AUG 0 1 1984
Durango, Colorado

IN REPLY REFER TO: 711
121.

AUG 1 1984

Memorandum

To: Area Manager, San Juan Resource Area, Bureau of Land Management, Room 102, Federal Building, 701 Camino Del Rio, Durango, Colorado 81301

From: Projects Manager, Durango Projects Office

Subject: Comments on the Draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for the San Juan/San Miguel Planning Area, Relative to our Paradox Valley Unit, Colorado River Basin Salinity Control Unit

Our comments are directed at the Wilderness Technical Supplement. The Dolores River Canyon Wilderness Study Area (WSA) as recommended in the preferred alternative will restrict and increase costs of implementing the Paradox Valley Salinity Control Unit.

The Federal government has invested considerable study and expense in locating potential brine disposal sites for the Paradox Valley Unit. Reclamation intends to drill a test injection well in Section 30, T47N, R18, in the fall 1985, but this site is outside the WSA on private land, and is unaffected. Results from testing this well will determine how many additional wells will be needed. We anticipate needing a second well by 1987 located in Section 31, T47N, R18W. The boundary of the preferred WSA alternative will restrict reasonable access to potential injection well sites on private land in Section 31. Few potential well sites exist in the area and Section 31 contains the most geologically favorable and economical sites for injection well number 2. Several access alternatives to Section 31 have been identified:

108-1 (152)

1. A gravel road could be built to Section 31 on the eastern bank of the Dolores River form an existing road. This alternative would minimize disturbance and cost and the road could be visually isolated from the river. A slight change in the wilderness boundary eliminating the eastern 1/4 of Section 31, 160 acres, from the wilderness area would be required (Figure 1).

2. Access is available from the west side of the Dolores River but also crosses the presently described WSA. However, the November 1980 Final Wilderness Study Area report sent to the public by BLM did not show the same boundary. The 1980 report boundary excluded from the WSA an area along the river bank which would provide access form the west side of the river to private land in Section 31 (Figure 2). An additional $1,000,000 would be required for bridge, pipeline, powerline, and road construction over the alternative previously described.

3. The present WSA boundaries can be observed and Section 31 accessed by constructing three bridges costing approximately $1.5 million or channelizing the Dolores River and constructing a road grade in the existing channel. Although this alternative would not interfere with the WSA, it does not appear consistent with maintaining a wilderness character in the river canyon.

4. The BLM "conflict resolution alternative" described in the subject document provides access to Section 31 but removes more land from the WSA than required. Our studies have shown low probability of success exists in well sites further upstream than Section 31.

108-1 (152)

Other well sites are being considered, but they have significantly more technical risk and are more expensive. Sites located centrally in Paradox Valley would cost an additional $2 to $4 million over those at the perimeter of the salt dome and are very risky because of additional depth and thickness of salt formation. Directional drilling is not feasible because of the limited drilling offset.

One other brine disposal alternative is available which involves pumping the brine 20 miles via 8 pumping plants into a 1,600-acre evaporation pond in Dry Creek Basin. This alternative is more costly, more environmentally disruptive and less locally acceptable.

We recommend an alternative wilderness boundary excluding the eastern 1/4 of Section 31. This would reduce the WSA by 160 acres and permit access to private land in Section 31. A less desired alternative costing Reclamation $1,000,000 more for access would be to maintain the WSA boundary as presented to the public in the 1980 Final Wilderness Study Area Report.

When implemented, the Paradox Valley Salinity Control Unit will remove 180,000 tons of salt from the Dolores River each year. The economic damages on agricultural, municipal and industrial water users of one ton of salt each year is currently $57 assuming salt concentrations in the Colorado River continue to increase to the turn of the century as they now appear to be. Using this analysis, the Paradox Unit will save water users over $10,000,000 annually.

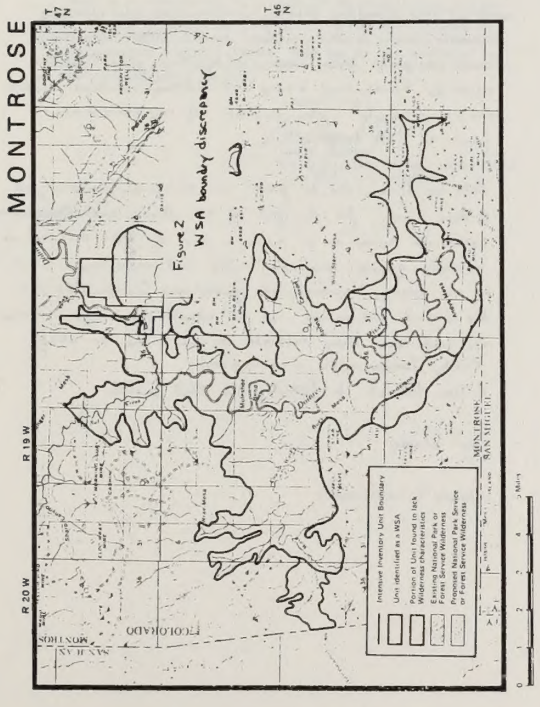
Page 2-20 of the Wilderness Technical Supplement under Lands refers to the Bureau of Reclamation's power site classifications. The responsibility for this classification was transferred to the Federal Energy Regulatory Commission many years ago.

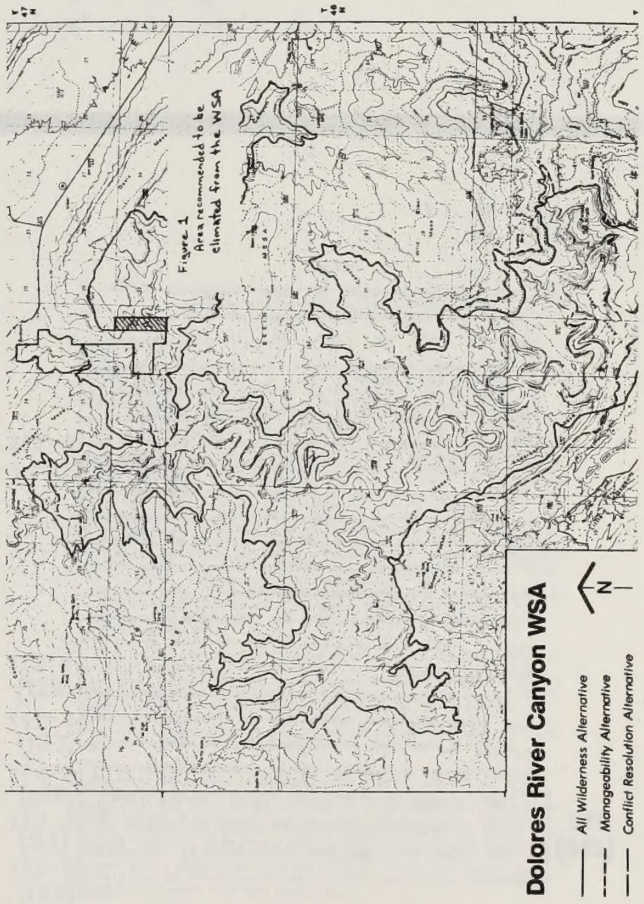
108-2 (29)

Thank you for the opportunity to comment on the subject documents. Consideration and implementation of our recommendations could save the Federal Government several million dollars and allow the Dolores River Canyon Wilderness Area to maintain its wilderness character.

Rick L. Gold

CO 030 290 Dolores River Canyon/Coyote Wash





Yellow Jacket, Colo.
Aug. 1, 1984

109

Dave Miller
Area Manager, B.L.M.
701 Camino Del Rio
Durango, Colo. 81301

FILMED
Bureau of Land Management
AUG 2 1984
Durango, Colorado

Dear Mr. Miller,

Arthur and I feel that it would be desirable most course of action if the B.L.M. would take away some of the land from the good cattlemen. There is a lot wrong going on at present time all the cattle, is the only thing "free range" is the grass in the fields, and as I told you on the phone in May, I was getting quite "fed up" of feeding this cattle for free.

Hope you very much will agree with this, and wish that five Yellowjackets could acquire a few of the cattlemens leases.

Thank you for listening, Yours truly,

Mrs. E. Mae (Arthur) Wilson

PO Box 1674
Grand Junction CO 81502
July 31, 1984 110

Mr Dave Miller, Area Mgr.
San Juan Resource Area, BLM
Federal Bldg, Room 102
701 Camino del Rio
Durango CO 81301

RECEIVED
Bureau of Land Management
AUG 2 1984
Durango, Colorado

Dear Mr Miller and staff:

Please include these comments in the record of the San Juan/San Miguel Resource Management Plan:

110 (138)

1) I support wilderness designation for all 8 Wilderness Study Areas (WSAs). My support is based on my familiarity with the Resource Area, especially oil and gas locations. While carrying out compliance checks, I also saw the canyons and mesas, their special beauty and quiet and their outstanding archeological resources. I was enormously impressed by the country, from bear and sunflower fields to ancient ruins and old homesteads. Having seen much of the existing mineral development plans for future development in the Resource Area, I feel strongly that those few remaining, un-roaded areas should be recognized and protected by putting them into the National Wilderness Preservation System. I am convinced that all of the WSAs fully qualify, would complement the system and that there is no conflict which cannot be resolved.

2) I am concerned with the poor range condition of public lands. Although range conditions may have improved since the Taylor Grazing Act, there is yet a long way to go to return to stable, healthy lands. I would like to see BLM continue to take the lead to upgrade the quality of public rangelands. Continued overgrazing leads to erosion and loss of top soil which are severely understated problems.

3) Public lands need not be National Sacrifice Lands for minerals, grazing and exploitation. Most of the Resource Area is open to leasing; it is not unreasonable to limit leasing in sensitive areas, perhaps trading off existing leases where advisable.

I feel that off-road vehicle use should be limited to existing roads and trails, of which there are a great many, as I recall.

I oppose all chainings and herbicide use, of propose. Low impact recreation, watershed protection, research and wildlife habitat are all legitimate, valuable uses of public lands for which BLM should be managing.

110 (138)

I feel strongly that no public lands, public water rights or minerals should be outright sold or given away when exchange can help solidify the public domain.

Those of us who know and love most public lands have differing feelings about them. Some folks have no

use for the struggling plants, shallow soils and scrappy animals that survive in these areas. Others of us have found surprise green seeps, interesting plants and animals, tremendous beauty and welcome solitude amidst the same lands. The majority of my recreation is found on BLM lands.

BLM has a mandate to protect the ecological health of all of these lands, for the good of all Americans. Designating wilderness areas is as much a part of that mandate as managing grazing, minerals, soils and recreation. I wish to see strong environmental protections incorporated into the selected alternative. It is abundantly apparent that the land can only tolerate so much of our abuse. Healthy lands make good economics.

I look forward to following the RMP process.

Best Wishes,

Jeanne T. Hemphill

111

FLINT RESEARCH ASSOCIATES
ARCHAEOLOGICAL INVESTIGATORS

26520 HIGHWAY 145
DOLORES, CO 81323

JOHN WOOD FLINT
M.A. SOCIAL ANTHROPOLOGY

PATRICIA ROBINS FLINT
Ph.D. ARCHAEOLOGY

July 31, 1984

RECEIVED
Bureau of Land Management

AUG 2 1984

Durango, Colorado

Mr. David J. Miller
San Juan Resource Area
Federal Building
701 Camino del Rio
Durango, Colorado 81301

Dear Dave,

Thank you for sending me a copy of the San Juan/San Miguel Resource Management Plan and Environmental Impact Statement Draft April 1984.

In reference to the treatment of cultural resources in the resource area, my main concern is with provisions for adequate budget and staffing. Although I personally plan to continue to volunteer for the United States and the Resource Area, there are far more needs for protecting and managing the cultural resources than volunteers can fill.

I heartily agree with the "Preferred Alternative" request for designating the area west of Cortez as an Area of Critical Environmental Concern. I would also suggest that the public lands north of Mesa Verde National Park be included in this designation.

I can only emphasize the need for more intensive efforts in inventorying and evaluating the cultural resources of the Resource Area as part of a Regional Design as expressed in your publication Archaeological Resources of Southwestern Colorado (1982 BLM, Denver) Cultural Resources Series Number 13. If the BLM is to truly manage the cultural resources, then avoidance may not necessarily be the primary measure of management. There needs to be a plan to utilize the cultural resources and make information available to the interested public. These efforts will take more funding and staffing than that now allocated in your plan. In cultural resources, in particular prehistoric archaeological sites, there is a responsibility not only to protect but also to interpret. This interpretation comes only through a regional plan of survey and excavation rather than spotty surveys in response to impending destruction.

Cultural Resources are one of the most important treasures of the public on lands managed by the BLM. The continuing protection and research into these resources is a vital part of the San Juan Resource Area's responsibility to the people of the United States. Your proposals for designating Areas of Critical Environmental Concern may well need expansion following further Cultural Resource Inventories. The preservation, protection, development, and maintainence of cultural resources may also require more financial and staffing input.

Thank you so much for the opportunity to comment. I look forward to continuing my work with you in preserving the heritage of the United States.

Sincerely,
Patricia Robins Flint
Dr. Patricia Robins Flint

112

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
1860 LINCOLN STREET
DENVER, COLORADO 80295-0699

AUG 1 1984

Ref: 8PM-EA

RECEIVED
Bureau of Land Management

AUG 2 1984

Durango, Colorado

Dave J. Miller, Area Manager
Bureau of Land Management
San Juan Resource Area
Room 102, Federal Building
701 Camino del Rio
Durango, Colorado 81301

Re: Draft San Juan/San Miguel Resource Management Plan/ Environmental Impact Statement and Wilderness Technical Supplement

Dear Mr. Miller:

The Region VIII Office of the Environmental Protection Agency has reviewed the referenced documents. The planning area contains very important natural and cultural resources justifying the effort used to produce the documents. Our detailed comments are enclosed. Having one of the public hearings in the Denver area (June 28, 1984) is commendable. We encourage this practice for future RMPs/EIS's.

We recognize the difficulty of adequately addressing the resource conditions, management plans, and environmental impacts for such a large and diverse area. Our concerns relate primarily to water quality and watershed management implementation planning. We believe that the RMPs are an extremely important mechanism for addressing the long-term management of these resources. We believe that the generally stronger management direction of the Resource Conservation Alternative is needed. However, the RMP should establish more specific objectives to be achieved. The following are some major areas in which we feel management objectives can be improved: riparian and aquatic habitat management; water quality improvemenis; soils loss and sediment yield reductions; vegetation management; and the water quality/sediment yield monitoring program.

112-1 (30)

Extensive site-specific project planning and impact analysis will be done under this broad RMP/EIS. We believe that there will be a continuing need for public and other agency involvement in planning some of these projects. The process and opportunity for this involvement need clarification.

2

Based on our concerns and the criteria EPA has established to rate the adequacy of draft environmental statements, we will list the Draft EIS in the Federal Register as Category ER-2. We believe that further evaluation and modification of the alternatives is needed in order to establish a stronger long-range resource management program. Thank you for consideration of our comments. If you need further EPA assistance, please contact Doug Lofstedt of my staff (844-2460 or FTS 564-2460).

Sincerely yours,

for Jack W. Hoffbuhr
Acting Assistant Regional Administrator
for Policy and Management

Enclosure

ENCLOSURE

EPA COMMENTS ON DRAFT SAN JUAN/SAN MIGUEL RESOURCE MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT AND WILDERNESS TECHNICAL SUPPLEMENT

Vegetation Management

We have several problems with the vegetation management program. As the RMP/EIS points out, at least 62 percent of the public land has vegetation in fair to poor ecological condition. Why is so much in this condition? We question the ability of vegetation in this type of condition to adequately protect watershed, soils, water quality and other resources in the Planning Area. The adequate cover needed to protect these resources needs to be described in more detail and included in Appendix Table 5-1 under soils and water, and wildlife. The differences in long-term, ecological improvement planned under the Resource Conservation, Resource Utilization, and Preferred Alternatives appear to be minor (pages 3-8, 3-31, and 3-56). As a result, the planned "Long-term, beneficial changes in vegetation condition" indicated in Table 1-11 on page 1-42 seem to be rather small. We believe that considerations for ecological improvement, water quality, soils, and watershed protection require a greater amount of long-term improvements. Consequently, the reasoning for such small improvement needs clarification. At least two sections of the Federal Land Policy and Management Act (FLPMA) lend support to these concerns. In Section 102(a)(8), Congress requires that the quality of the "ecological, environmental," and "water resource" values will be protected. Section 401(b)(1), recognizes the substantial amount of range land in deteriorating condition and establishes a "range rehabilitation, protection, and improvements" program to benefit livestock, wildlife, and watershed protection.

112-2 (87)

112-3 (126)

We support the extensive number of allotment management plans (AMPs) to be done. The Appendix should numerically "prioritize" the AMPs and other investments in order that the "greatest potential for improvements of aquatic and (or) terrestrial wildlife habitat, watershed, and vegetative conditions" (page 1-23) will be achieved. Needed improvements in these conditions are

112-4 (127)

identified in Category I allotments (Appendix page 9-A-1). However, vegetation and soil and water quality problems are not identified as problems needing management action in Appendix Nine-D. This should be done.

112-5 (128)

The environmental impacts of burning 2,000 acres, "vegetation treatments" (apparently such actions as chaining, roller chopping, and plowing) on 10,100 acres, and seeding 10,000 acres under the Preferred Alternative (page 1-23) need to be defined in Chapter 3. These actions are also mentioned

112-6 (32)

under Cultural Resources impacts (page 3-63). How "permanently affecting 1,400 archeologic and historic sites" by vegetation treatment on 22,000 acres will be reduced to insignificant impacts by inventorying and monitoring, needs clarification. What justifies this large amount of "treatment"? What are the

112-5 (128)

quantified and unquantified costs and benefits? Without this supporting information, the minimal new treatment in the Resource Conservation Alternative appears to be more appropriate.

Water Quality/Quantity, Soils, and Watershed

We would like to see the discussion in Chapter 2 on water quality, soils, sediment yield, and watershed resource problem areas more closely correlated to the maps. In this manner, the correlation of planning actions to treat specific problem areas would be clearer. The areas on which soil and water improvements are stressed are mapped (Emphasis K areas). However, the areas vary depending on alternative. We recommend a map showing a complete picture of problem areas needing treatment, including existing erosion problems such as disclosed on page 2-17 and 2-20. We are concerned that in a very substantial part of the planning area, the erosion rates are moderately to severely accelerated. An erosion inventory was conducted for 37 percent of the planning area. An important function of the RMP/EIS should be to target when an erosion inventory will be done for the remaining 63 percent of the planning area. 112-7 (31)

The current Colorado water quality standards, including designated beneficial uses and use protection criteria, should also be included as a planning base. Streams meeting or exceeding these standards should be identified.

The statement that "water quality is presently managed in accordance with the Clean Water Act of 1977" is made on page 2-18. The RMP/EIS needs to give more supporting documentation to this statement. Numerous existing water quality concerns and inadequacies in nonpoint source pollution control are noted in the RMP/EIS. Consistency of water-related resource management to EPA's current water quality standards regulation (40 CFR Part 131) is an important consideration. This regulation does not allow the State to remove a designated use if, 1) the use is existing (unless a use requiring more stringent criteria is added), or 2) if the designated use can be attained through required technology controls or best management practices (Part 131.10(h)). This is mentioned in general on page 1-8. The criteria for water quality protection in post-RMP projects need to be more specific (also on page 1-8). 112-8 (33)

One example of this consistency issue relates to the acid and heavy metal pollution in the Upper Animas River drainage (pages 2-20 and 21). The RMP/EIS should establish a stronger planning base for implementing any needed control activities. What are the water quality monitoring data and impacts to designated beneficial uses? The pollution sources should be mapped and "prioritized". Any inter-agency programs needed for reclamation need to be identified in the RMP/EIS. What are the water quality and reclamation criteria to be applied to the individual projects? What are the water quality and aquatic habitat improvements to be achieved? The Preferred Alternative targets only five reclamation projects versus 20 in the Resource Conservation Alternative. What is adequate? Because of this lack of information, we do not believe that there is adequate support in the RMP/EIS for the statement that water quality improvements "would be in accordance with the Clean Water Act of 1977", and would benefit range and terrestrial/aquatic wildlife (page 2-21).

There should be clarification as to why nutrient parameters, such as phosphorus, are not listed as a major concern (page 2-18).

We commend the RMP direction of reducing diffuse sources of salinity. Our concerns about the implementation of this direction are inter-related to the other concerns we have expressed regarding water quality, watershed, soils, and vegetation management. A stronger planning base for these resources would lend much stronger support to the nonpoint source salinity control efforts. We would like to see the projected salinity reductions quantified, if possible, between alternatives. 112-9 (34)

The intention to develop "watershed management plans for all erosion and salinity areas" is common to both Resource Conservation and Preferred Alternatives (pages 1-29 and 1-37). We agree with this direction. Project priorities, and basic criteria and objectives to be met in the plans need to be set forth in the RMP/EIS. Correlation with the applicable 208 water quality management plan(s) should be clarified. On page 5-36, we believe that the development of "watershed management plans for all erosion and salinity areas" needs to be under the Resource Conservation Alternative to be consistent with Chapter 1. 112-10 (35)

The RMP/EIS needs to target specific inventories/studies to quantify sediment yields. There doesn't appear to be a correlation of this inventory need to AMP development and other watershed treatment activities. 112-11 (36)

We are concerned that the Preferred Alternative may not adequately address the aquatic/riparian problem areas. Of the 144 miles of inventoried habitat, 94 percent (over 135 miles) is in fair and poor condition (page 2-24). The Preferred Alternative targets treatment only on 94 miles versus 249 miles under the Resource Conservation Alternative. It appears that treatment in addition to the 94 miles, and baseline habitat inventories and studies, need to be scheduled in the RMP/EIS in order to substantially improve this deteriorating trend. The RMP/EIS should clarify why interim actions can't be taken on specific areas where continued riparian degradation is occurring (such as along Dry Creek, page 3-11). Table 1-11 and Chapter 3 should present a stronger program for improving riparian/aquatic habitat by being more specific on beneficial impacts to be achieved under each alternative. For example, what are the impacts of intensive livestock and wildlife management "on an additional 306 miles of habitat" (page 1-43)? In the interest of habitat maintenance and improvement on the San Miguel River, we would like to see the discussion on page 2-24 be more specific on planned management actions. 112-12 (37)

The discussion of impacts to soil and water, terrestrial wildlife, and aquatic and riparian habitats points to improvements as a result of better vegetation conditions. However, the discussions of vegetation are not clear about what these plant community improvements will be. The emphasis instead seems to be on increased livestock forage production.

Establishment of watershed and water quality best management practices is commendable (Appendix pages 6-1, 2, and 3). We would like to see more detailed criteria for preventing "logging across any stream supporting resident fish or on any stream where a downstream water system might be affected". There should be additional guidance on determining "appropriate" buffer strips along streams, springs, and meadows. We would also like to see additional design criteria for new road nonpoint source pollution control. 112-13 (38)

The BLM plans to maintain or improve water quantity necessary for the management of the various resources (Appendix pages 5-4, 5-8, and elsewhere). Intentions to apply for Colorado water appropriations for BLM "programs" is mentioned on page 3-1. We believe that the RMP/EIS should clearly define BLM plans to maintain or improve water quantity in relation to specific resource management goals. Of particular concern to EPA is the minimum flows needed to protect the stream beneficial uses as assigned in Colorado's water quality standards. Any needed inter-governmental agreements need to be addressed. 112-14 (39)

Areas of Critical Environmental Concern

Establishment of a 156,000-acre Area of Critical Environmental Concern (ACEC) west of Cortez (in the Preferred Alternative) appears to be very justifiable. However, the area referred to is mapped largely as having a livestock grazing emphasis (Area A) rather than as Area L (emphasis on an ACEC). Thus, the management guidance for the ACEC (Appendix pages 5-37-39) needs to be correlated to the Preferred Alternative map. It is unclear why this management direction wouldn't be justified under the Resource Conservation Alternative. What actions would replace ACEC protection? We believe that the issue of consistent designation of an ACEC needs consideration because of the priority given to ACEC protection in Sections 102(a)(11) and 202(c)(3) of FLPMA. 112-15 (40)

Minerals Management

The water quality, and riparian/aquatic habitat management goals in relation to the design of best management practices for minerals development need inclusion in Chapter 3. The RMP/EIS needs to clarify that new leases will adequately recognize potential environmental restrictions so that an adequate base is created for adding site-specific requirements when applications for a Permit to Drill are considered.

It appears that there are some labeling errors in the amount of gas that could potentially be lost under the Preferred Alternative. The total gas lost from the three WSAs listed in Table 3-7 is 2.6 billion cubic feet (BCF), rather than 2.6 million cubic feet (MMCF) as indicated on page 13-55. In addition, our calculations resulted in an estimated 8.1 BCF of gas lost because of leasing restrictions for all areas, rather than 3.9 MMCF as indicated on page 3-56. 112-16 (57)

Wilderness

The Preferred Alternative recommends only one of the wilderness study areas (WSAs) for inclusion in the National Wilderness Preservation System (NWPS). The rationale for this decision needs clarification. The WSA evaluations indicate that the non-recommended areas substantially meet the evaluation criteria. In most cases, the non-recommended areas contain ecological diversity that is either non-existent or would substantially add to the ecological diversity of the NWPS. 112-17 (138)

Monitoring

We have several concerns regarding the monitoring and evaluation plans addressed in Appendix Seven (pages 7-1 and 2). Monitoring of vegetation, soils, watershed, and water quality/quantity resources are of specific concern. Evidently, the monitoring/evaluation plans will be done after the final RMP/EIS is completed. We believe that the RMP/EIS development process (including public and inter-agency involvement) is the appropriate mechanism for defining these plans. In addition to these concerns, we would like to see the final RMP/Record of Decision address the following monitoring/evaluation concerns: 112-18 (41)

- water quality monitoring intensity necessary to evaluate adequacy of best management practices for controlling nonpoint source pollutants (and salinity point source control projects), and to demonstrate compliance with State water quality standards,
- consideration of both chemical and biological monitoring,
- water quality monitoring responsibilities of BLM, mineral development lease/claim holders, and other State and Federal agencies,
- vegetation monitoring intensity, type, and priorities,
- funding sources,
- pre- and post-development monitoring requirements,
- corrective actions that could be taken in the various situations that could arise (other than amending or revising the RMP) when problems are identified by monitoring,
- and coordination and approvals of the monitoring and remedial action plans by other relevant agencies including State water quality and wildlife agencies.

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P.O. Box 715,
Durango, CO 81301
July 26, 1984

RECEIVED
Bureau of Land Management
AUG 2 1984
Durango, Colorado

Mr Dave Miller, Area Manager,
San Juan Resource Area Office,
Bureau of Land Management,
701 Camino del Rio,
Durango, CO. 81301

Dear Mr Miller;

I congratulate you on the Resource Management Plan which you have prepared for the San Juan-San Miguel area and for the consideration you have given to all of the interests involved.

You and your staff have been selected to manage a portion of our public lands. We have charged you with the task of overseeing the use of these lands and resources "for the greatest good of the greatest number in the long run." Most of you have spent years in study and training and have accumulated years of experience in various aspects of this task. Without question you are well qualified. I have confidence that the overwhelming majority of you will carry out this assignment to the best of your ability.

It is regretable that in our society it is necessary for you to expend a large share of your time and energy in explaining your decisions and conducting expensive public hearings . Unfortunately we cannot deny anyone the opportunity to express their desires.

The decisions you will make are difficult. They require much thought,wisdom and courage. I urge you to resolutely defend the course of action that you have selected as being most fitting in view of the many conflicting short term and long term needs and the egoistical and altruistic interests involved. Any concessions you make to narrow pressure groups must be minimal.

I wish you well in your efforts.

Very truly yours,

Mrs. C. Kenneth Pearse

Mrs C. Kenneth Pearse.

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UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ENDANGERED SPECIES
1406 FEDERAL BUILDING
125 SOUTH STATE STREET
SALT LAKE CITY, UTAH 84138-1197

(SE) August 1, 1984

RECEIVED
Bureau of Land Management
AUG 3 1984
Durango, Colorado

MEMORANDUM

TO: David J. Miller, Area Manager
San Juan Resource Area
Bureau of Land Management
Durango, Colorado

FROM: Fred L. Bolwahnn, Field Supervisor
Endangered Species Office
U.S. Fish and Wildlife Service
Salt Lake City, Utah

SUBJECT: Section 7 Consultation for the draft San Juan/San Miguel Resource Management Plan/Environment Impact Statement

[illegible] reviewed the subject RMP/EIS received April 28, [illegible] provides the following comments.

[illegible] with the assessment that all of the alternatives will [illegible] threatened and endangered species. For [illegible] restrictions against surface occupancy oil and gas [illegible] imposed for the Spring Peak peregrine falcon eyrie, as well as the bald eagle winter concentration areas that will be protectively managed with seasonal oil and gas stipulations will provide protection for both of those species.

If specific questions arise during the implementation of this [illegible] concerning endangered species, please feel free to contact us at your convenience.

Robert Burton
for Fred L. Bolwahnn

116

STATE OF COLORADO RICHARD D. LAMM, Governor
DEPARTMENT OF NATURAL RESOURCES
DAVID H. GETCHES, Executive Director
1313 Sherman St., Room 718, Denver, Colorado 80203 866-3311

Geological Survey
Board of Land Commissioners
Mined Land Reclamation
Division of Mines
Oil and Gas Conservation Commission
Division of Parks & Outdoor Recreation
Soil Conservation Board
Water Conservation Board
Division of Water Resources
Division of Wildlife

August 1, 1984

RECEIVED
Bureau of Land Management
AUG 3 1984
Durango, Colorado

Mr. Kannon Richards, State Director
U.S. Bureau of Land Management
1037 Twentieth Street
Denver, Colorado 80206

Dear Mr. Richards:

We appreciate the opportunity to review the draft Resource Management Plan (RMP) for the San Juan/San Miguel Resource Management Area. The draft RMP is generally well done, and we support most features of the preferred alternative. We are particularly pleased with the proposals to designate the Anasazi Cultural Multiple Use Area as an Area of Critical Environmental Concern (ACEC), to create the Dolores River Special Recreation Management Area, to designate the Tabeguache Canyon Outstanding Natural Area, and to retain the McElmo Research Natural Area. We are also pleased with the decision to protect wildlife values in the East Cortez KRCA by directing coal leasing to other areas. Our specific comments on the draft RMP follow.

Anasazi Cultural Multiple Use Management Area

The Sacred Mountain area contains world-class cultural resources that must be protected. If managed properly, the area can provide a significant boost to the tourism industry in the area. The proposed ACEC will allow continued multiple use management for wildlife, grazing and resource development. Designation should give the area the visibility it needs to attract the budget required for proper management of cultural resources.

Wildlife

116-1 (93)

The description of the fish and wildlife resources is well done and indicates considerable study and close coordination with the Colorado Division of Wildlife. The RMP adequately identifies impacts on wildlife from the four alternatives but it lacks details describing potential conflicts. For instance, the document describes impacts of

116-1 (93) other uses of public land but does not discuss development of subdivisions, fairgrounds, water developments and mining construction on private land adjoining BLM land. A strong mitigation plan and a good monitoring system are essential for the maintenance of fish and wildlife resources. The Division of Wildlife should be involved in the annual work plans for wildlife related plans.

The preferred alternative benefits terrestrial wildlife and realistically provides for other uses. Aquatic wildlife does not receive as many benefits under the preferred alternative as it would under several other alternatives. We believe more intensive vegetative management could significantly improve wildlife. The preferred alternative should incorporate enough protective measures to insure the maintenance of big game populations. The East Cortez KRCA is of particular concern because it provides several thousand acres of critical deer and elk winter range and is a major migration route between summer and winter ranges. Protection of several areas is essential, including East Cortez KRCA, Dolores River, Weber and Menefee Mountains, Cross, Cahone, and Squaw/Papoose Canyons, Tabeguache Creek and Ewing Mesa. Designation of public lands west of Cortez as an ACEC should provide additional protection for critical wildlife habitat.

116-2 (94) The preferred alternative would dispose of 21,800 acres of public land. This could have a significant adverse effect upon fish and wildlife resources. Therefore, we request that the Division of Wildlife have an opportunity to evaluate all public lands scheduled for disposal which provide important wildlife habitat for possible acquisition.

McElmo Research Natural Area

We are pleased that the draft RMP recommends retention of the BLM Research Natural Area designation and boundaries for the McElmo Research Natural Area (RNA), and that the identified area will be managed for research and educational purposes. However, the status of the McElmo RNA in the various proposed alternatives in the RMP is confusing. The preferred alternative for the RMP should explain how the McElmo RNA will be managed. The explanation could be similar to the "special management areas" section in the "current management (no action) alternative." The RMP Preferred Alternative Map (west half) should identify the McElmo Research Natural Area.

116-3 (95)

If the status of the mineral withdrawal for the RNA is in question, the RMP should clarify the issue. We recommend that the mineral withdrawal for McElmo RNA be retained. We support application of a no surface occupancy stipulation for oil and gas leasing to the entire McElmo RNA. Specific stipulations applied to the McElmo RNA

116-3 (95) should guide other mineral exploration and development activities in that area and should be completed during the "application for a permit to develop" (APD) process.

The effect of intensive grazing on the herpetological fauna in the McElmo RNA was discussed during a meeting between BLM and Natural Areas Program personnel in Durango on January 10, 1984. Some 1977 studies of the area identified the effects of grazing on the McElmo RNA . BLM personnel indicated that the grazing situation at McElmo RNA would be re-evaluated after the RMP was approved and, based on the re-evaluation, adjustments in AUMs could be made. Those at the meeting also discussed the possibility of cooperative studies of McElmo RNA by BLM and Colorado Division of Wildlife, if funds become available.

Wilderness

116-4 (138) We support the proposal to designate a wilderness area for the Dolores River Canyon area. We urge you to reconsider the proposed decision not to designate other wilderness areas. We prefer the ecological diversity alternative of the draft RMP for managing proposed wilderness areas in the San Juan Resource Area. It provides a balanced approach to wilderness designation and protects areas that have important wilderness characteristics. Failing wilderness designation, we support the proposal to restrict motorized access and to provide for no-surface occupancy stipulation on oil and gas leasing for parts of the WSAs that can be reached by directional drilling.

116-5 (96) Special BLM management guidelines and recognition of the botanical importance of the Coyote Wash area should accompany a wilderness designation of the Dolores River Canyon. The final RMP should include provisions and management commitments for formal protection of the natural values of Coyote Wash as an RNA, if the Dolores River Canyon is not designated wilderness by Congress.

116-6 (42) Bureau of Reclamation proposals for deep-well injections of saline water in the area, as part of an effort to control salinity in the Colorado River, may conflict with wilderness designation and management. The proposals call for wells in Range 19 West, Township 47 North, Section 36 and possibly Range 18 West, Township 47 North, Section 31. The wells are expected to remove 180,000 tons of salt annually -- rather than the figure of 107,000 used on page 2-20 of the Supplement. We urge you to determine which figure is correct. The apparent conflict between salinity control and wilderness and the

discrepancy about salt loading need further review. We intend to study Bureau of Reclamation recommendations on well sites. Wilderness boundaries should not preclude essential options for the salinity control project.

We are examining the proposed WSAs and will make specific recommendations to you on wilderness designations.

Additional comments

Attached to this letter are detailed comments about wildlife, paleontological sites, scientific areas, and other issues.

Sincerely,

DAVID H. GETCHES
Executive Director

DHG:ljc
Attachment

San Juan/San Miguel Resource Management Plan

Detailed Comments

116-7 (97) Page 1-18: Table 1-4 should be changed. The dates for elk calving grounds should be 5/1 to 7/1 and the dates for sage grouse strutting grounds should be 3/15 to 5/31.

116-8 (98) Page 1-35: The transplant of Merriam's Turkey should also be listed in the Wildlife-Terrestrial section.

116-9 (99) Page 2-27: Table 2-13 shows Tabeguache Creek as having Rainbow and Brown trout and suckers present. Since the lower end often dries up where are the brown trout located? We did stock brook and rainbow trout here in 1971.

Page 2-54: Fishing could be added to the list of recreational opportunities in the first paragraph.

116-10 (100) Page 3-30: Under Energy and Minerals, we disagree that the Resource Utilization Alternative impact on wildlife would be similar to the Resource Conservation Alternative. Emphasizing mineral development will have a much greater impact than the protection afforded by the latter alternative.

116-11 136 Page 3-55: The last paragraph proposes 560 acres in Tabeguache Creek be designated an Outstanding Natural Area. We would suggest this acreage be increased to protect more of its cultural and wildlife values.

116-12 (26) The Resource Conservation Map has areas marked "Les" but there is no key. Apparently this refers to ACEC's but are not shown on the Preferred Alternative map. Why not?

Coyote Wash Within the (Dolores River Canyon WSA).

116-13 (83) CNAP supports wilderness designation for the Dolores River Canyon Wilderness Study Area (WSA). Coyote Wash (see enclosed boundaries), a major tributary of the Dolores River and within the WSA, was identified by the Colorado Natural Heritage Inventory and BLM botanists as habitat for several plants of special concern (rare) in Colorado:

Erigeron kachinensis	Category 2	Candidate for federal listing as threatened or endangered.
	G1S1	Critically imperiled globally and in Colorado because of extreme rarity; endangered throughout range; 1 to 5 known occurrences in Colorado, especially vulnerable to extirpation.

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	G1S1	Critically imperiled globally and in Colorado because of extreme rarity; endangered throughout range; 1 to 5 known occurrences in Colorado, especially vulnerable to extirpation.
Mimulus eastwoodiae	G3S1	Very rare and local over range; restricted and threatened throughout range; critically imperiled in Colorado because of extreme rarity.

116-13 (83)

Coyote Wash also contains a plant association of special concern to Colorado:

Hilaria jamesii - Oryzopsis hymenoides - Stipa comata Great Basin Grassland (relict)	G2S2	Globally imperiled and endangered throughout range; imperiled in Colorado because of rarity and vulnerable to extirpation in Colorado.

This plant association may once have been common in southeastern Utah and southwestern Colorado. It is now known from only a few isolated mesas in western Montrose County, Colorado, and an inaccessible part of Canyonlands National Park in Utah.

Spring Creek (Paradox Preserve).

This site, also identified by the Colorado Natural Heritage Inventory, contains the best known occurrences in the world of the federally endangered plant species, Echinocereus triglochidiatus var inermis. More than 300 individuals occur on the site. CNAP recommends that BLM recognize the site and provide special management area guidelines for the site in the RMP. Detailed information on the site should not be disseminated to the public because of the sensitivity of the plant to collecting and its desirability for collection. This site might be afforded adequate protection by BLM under formal SMA designation of the site for other reasons. CNAP may request permission from BLM for the Colorado Natural Areas Council to consider the site for registration upon the completion of our evaluation of the site.

East Paradox Creek.

116-13 (83)

This site, also identified by the Colorado Natural Heritage Inventory, contains the best known occurrence of Lupinus crassus (Category 2 - candidate species for federal listing as threatened or endangered; and G2S2 rank -- imperiled globally and endangered throughout range and in Colorado; vulnerable to extirpation in Colorado). The East Paradox Creek site should be identified in the RMP with specific management prescriptions for the site. The Colorado Native Plant Society has proposed this site to BLM as an ACEC. CNAP is evaluating the East Paradox Creek site prior to requesting permission from BLM for the Natural Areas Council to consider placement of the site on the Colorado Natural Areas Program Registry. We expect to complete our evaluation by this fall.

Paleontological Sites.

116-14 (78)

The BLM Geological Advisory Group is evaluating several identified paleontological localities along the San Miguel River (near Placerville) and near Paradox, Colorado. The location of the localities, the extent and quality of the fossil material, and appropriate management recommendations will be included in the Geological Advisory Group's report to BLM scheduled to be submitted in September. The Paleontology section of the RMP does not cite specific protective measures to be instituted by BLM on paleo sites nor does Appendix 5, "Emphasis Areas/Management Guidance," contain directions for managing these sites. Appropriate protection and management for identified paleo sites should be included in the RMP.

Other Comments

In Appendix 6, "Best Management Practices," the RMP should include commitments to protect federal candidate (Categories 1 and 2) plant and animal species. Adequate protection of these species should help to prevent the listing of the plant and animal taxon as threatened or endangered by the U. S. Fish and Wildlife Service.

In Appendix 7, given the poor state of botanical knowledge of southwestern Colorado, monitoring and evaluation of essential habitat for plant taxa which are nationally rare or rare in Colorado is important. Monitoring and evaluating rare plant habitats should occur in conjunction with the range program, with some habitats being used as baseline study areas. Lesquerella pruinosa and Phlox caryophylla, USFWS Category 2 plant taxa, may occur on BLM-administered land in the Pagosa Springs vicinity and should be included in any monitoring and evaluation studies. CNAP can cooperate with BLM in the design and implementation of these studies.

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RECEIVED
Bureau of Land Management
AUG 3 1984
Durango, Colorado

EXXON COMPANY, U.S.A.
POST OFFICE BOX 120 • DENVER, COLORADO 80201

EXPLORATION DEPARTMENT
WESTERN DIVISION

C. L. WILKOTT
GEOLOGICAL MANAGER

August 1, 1984

Mr. David J. Miller
Bureau of Land Management
San Juan Resource Area
Room 102, Federal Building
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller:

Exxon Company, U.S.A. is pleased to have the opportunity to comment on the San Juan/San Miguel Draft Resource Management Plan and Environmental Impact Statement (DRMP/EIS). Exxon has a strong interest in the planning process for federal public lands because many of these lands have potential for oil and gas discovery and production.

We have reviewed the San Juan-San Miguel DRMP/EIS and found the publication to be well-written and well-documented. The joint release of the Wilderness Technical Supplement and the DRMP/EIS allowed for an expedient and thorough analysis. We commend the San Juan Resource Area's interdisciplinary team and staff for their efforts.

We examined the DRMP/EIS document for its range of alternatives and their impacts, particularly as it relates to oil and gas exploration and development activities. Exxon finds it very encouraging to see oil and gas considered as a multiple use resource. In addition, the impacts on oil and gas by the implementation of each alternative is evaluated. Most important, the Bureau recognizes and addresses the conflicts which exist between the development of subsurface resources such as oil and gas and the protection of surface resources like the Anasazi archeologic sites and Wilderness Study Areas. We found the discussion on geology and minerals to be realistic in terms of oil and gas, uranium, vanadium, coal, and carbon dioxide resources.

Exxon generally concurs with the recommendations of the preferred alternative with the exception of the wilderness issue. While we endorse your "unsuitable for wilderness" designation for the seven Wilderness Study Areas, we do not believe the Dolores Canyon WSA should be recommended for withdrawal as wilderness. We believe the resource potential for Dolores Canyon should be strongly considered in any land use plan based on the following geologic discussion:

117 (138)

> The Dolores Canyon Wilderness Study Area, in Montrose County, lies within an oil and gas producing fairway. Both the oil industry (by virtue of pre-FLPMA leases) and the government (through the DRMP/EIS impact analysis) recognize the high oil and gas potential present under the Dolores Canyon WSA. Exxon explorationists are confident that the necessary elements of source rock, stratigraphy, structure, and reservoir rock are present; and given the proper combination, could yield hydrocarbons. Our belief in this potential has resulted in Exxon's acquisition of leases in three land blocks in and adjacent to the Dolores Canyon WSA. We believe the oil and gas potential for Dolores Canyon is probably similar to the Southeast Lisbon field, 12 miles to the southwest of Dolores Canyon in San Miguel County. Southeast Lisbon has a published estimated ultimate recovery of 8.3 billion cubic feet of gas and 104,000 barrels of gas condensate.

The specific location, size, and economic potential of the Dolores Canyon prospect are unknown at this time, but its existence and value should be considered and accomodated in land use planning.

The BLM, in its Preferred Alternative recommends No Surface Occupancy (NSO) leasing which, in combination with directional drilling, is used to address the oil and gas potential of seven Wilderness Study Areas. We question the advisability of such leasing, especially in areas which have shallow pays as is true for the San Juan Resource Area. In many instances, denial of surface access will effectively remove an area from oil and gas exploration or production. Limits on directional drilling are economic and mechanical. Hole deviations up to 30° from vertical are possible in the Rocky Mountains but in many cases deviation limits are much more restrictive, especially for shallow drill depths.

We believe the BLM should recognize that while the technology for directional drilling is quite advanced and useful, the Bureau should exercise practical restraint in suggesting directional drilling as a ready alternative to surface access.

Thank you for the opportunity to comment on the San Juan-San Miguel Resource Area Draft Resource Management Plan. Should you have any further questions or if we can be of further assistance, please contact Mr. Amos Plante (303-789-7550) or Mr. Fernando Blackgoat (303-789-7488) in our Denver office.

Sincerely,

C. L. Wilmott

FB:mma

c - Mr. W. R. Campbell
Mr. R. R. Dern
Mr. A. A. Plante
Mr. H. W. Praetorius
Mr. O. E. Rosenbaum
Mr. T. F. Walsh

118

Alice I. Frell
Lands Director

RECEIVED
Bureau of Land Management
AUG 6 1984
Durango, Colorado

Rocky Mountain Oil & Gas Association, Inc.

345 PETROLEUM BUILDING • DENVER, COLORADO 80202
303/534-8261

August 1, 1984

Mr. Dave J. Miller
Area Manager, Montrose District
Bureau of Land Management
701 Camino del Rio
Durango, CO 81301

Dear Mr. Miller:

I am writing on behalf of the Rocky Mountain Oil and Gas Association (RMOGA) to comment on the Resource Management Plan (RMP) for the San Juan/San Miguel Resource Area. RMOGA is a trade association whose members account for more than 90% of the exploration for oil and gas in the eight-state region it serves.

The RMP is a well-documented and well-written study. We applaud your efforts as a positive approach to communication concerning planning and management opportunities throughout the entire planning process.

We support the Preferred Alternative as an effective combination of the other alternatives. We do note in the Preferred Alternative that some 300 bighorn sheep will be reintroduced into this area. In some federal land areas there has been significant controversy due to bighorn sheep "stress". If the sheep could be confined to the canyon, we can foresee little conflict with resource users outside those boundaries. This would help prevent unreasonable delays in permitting and unnecessary restrictions on activities of other public lands users.

We are fortunate to have the Shell McElmo Dome project operating within the Resource Area. It is an excellent example of effective co-existence between cultural preservation and oil and gas development. We believe that with the high potential for oil and gas in this area, both wilderness recreation activities and oil and gas exploration and production can and should be permitted in the Resource Area.

118 (79)

Additionally, considering the significant potential for oil, gas and CO_2 in the area, we believe, with reasonable environmental protection stipulations, that the "no leasing" restrictions could and should be lifted in the Cross, Cahone and Squaw/Papoose Canyon areas and the Menafee and Weber

118 (79)

Mountain areas. Existing environmental statutes and regulations provide superlative protection to sensitive environmental values on all public lands. Withdrawing these areas from oil and gas leasing is an unnecessary step and one which, as the Interior Board of Land Appeals has ruled in numerous instances, should not be taken except in the most extreme circumstances, and after analyzing all of the alternatives. Specifically refer to the case of Robert G. Lynn, 76 IBLA 383, and the BLM Instruction Memorandum 84-254 which provides instruction to the field on compliance with the Lynn case.

If companies can develop an environmentally sound plan of operations acceptable to the BLM, then a decision to permit such operations should be considered. Clearly a no surface occupancy stipulation would provide the same degree of protection as a no-lease decision, yet would permit companies interested in the area to present to the BLM a responsive operating plan which mitigates the impacts of activity in the area. If such plans can be developed, there is no reason oil and gas activities cannot take place.

Again, we congratulate you on a comprehensive and thoughtful Plan, and we encourage your consideration of these comments. Thank you for the opportunity to express our views.

Very truly yours,

Alice I. Frell
Public Lands Director

AIF:cw

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United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
ALBUQUERQUE AREA OFFICE
P O BOX 8327
ALBUQUERQUE, NEW MEXICO 87198-8327

IN REPLY REFER TO
340-Rights Protection

RECEIVED
Bureau of Land Management
AUG 6 1984
Durango, Colorado

Dave F. Miller, Area Manager
San Juan Resource Area-BLM
Room 102, Federal Bldg.
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller:

We received your Resource Management Plan and Environmental Impact Statement (EIS) on July 27, 1984, and requested an extension of the comment period. We have reviewed the EIS as part of the United States trust responsibility for natural resources on the Ute Mountain Ute and Southern Ute Indian Reservations. Our comments on water resource impacts are outlined below.

1. An irretrievable commitment of water is part of every consumptive use in the management plan. These should be estimated and explicitly acknowledged. Coal mining on 46,000 leased acres could have a particularly large impact on water depletion.

2. Mine dewatering will have an impact on neighboring properties off the public lands. Lease areas adjoin the Indian reserved trust lands for many tens of miles. The effect on groundwater levels and availability of supply on the reservations should be identified.

3. The report notes that groundwater moves toward the low-lying areas. Leachate from coal lease areas such as along Ute Creek, northeast of Ignacio, could move onto and degrade waters used by the Southern Ute in this irrigated area.

4. A statement regarding the quantity of water to be depleted by the proposed action, the streams and aquifers affected, and the magnitude and locality of water quality changes should be added. The particular effects on the lands and water held in trust by the United States for the Ute Reservations should be thoroughly discussed.

119 (54)

Sincerely,

Barry W Welch
Assistant Area Director (Trust)

120

July 29, 1984

Bureau of Land Management
San Juan Resource Area
Federal Building
701 Camino del Rio
Durango, CO 81301

Please send a copy of the San Juan/San Miguel Resource Management Plan/Environmental Impact Statement to the following address:

Mrs. Teresa Seamster
3847 Orion Court
Boulder, CO 80302

Also, could you make a note of my initial comments regarding proposed coal leasing in the Cortez-Pagosa Springs Area, as a landowner in the Hesperus-Breen area.

COMMENTS:

It is difficult to understand why the Bureau of Land Management is giving priority to coal leasing on some 48,000 acres around the Durango area at a time when there is no demand for additional coal, and when ample areas of cheaper and more accessible coal have already been developed. In addition, the prospect of allowing further strip mine operations in La Plata County is alarming for those who want to develop the area as a recreational/historical center in southwest Colorado. The revenue raising potential of a well planned system of resorts, wilderness and archeological areas for viewing, outdoor activity and study, and winter sports far surpasses the short-term revenues from mining (and long-term environmental damage it leaves behind).

120 (70)

The conflict this leasing proposal will generate with local landowners and ranchers (ourselves included) hopefully will cause BLM to rethink its function as a land management office. Despite this current administration's philosophy of budgeting its defence projects by bankrupting the country and selling off its assets in unprecedented amounts, your job is to manage the land for long-term benefit... not to blindly follow short-sighted leadership.

Teresa C. Seamster

120
RECEIVED
Bureau of Land Management
AUG 6 1984
Durango, Colorado

121

RECEIVED
Bureau of Land Management
AUG 6 1984
Durango, Colorado

Rick Morrell
P.O. Box 3086
Durango, CO. 81302

Dave Miller
San Juan BLM
701 Camino Del Rio
Durango, CO. 81301

Dear Dave,

I attended the public hearing in Durango on the BLM Resource Management Plan, & I am in strongo favor of having all of the eight W.S.A.s designated as Wilderness areas.

I have visited five of the eight areas, & have enjoyed their semi-arid desert ecosystems, which are unique & unrepresented in the National Wilderness Protection System. My reasons for visiting these areas, besides solitude & beauty, were to photograph the cottonwood oasis creek bottoms, the Anasazi ruins, the blooming cacti, & all other things one might find in a desert-canyon-wilderness. My photographs were used in a slide show put together & narrated by Tamara Wiggans. I just hope these areas will remain untouched by oil & gas companies so future generations can enjoy photographing them as I have.

121 (138)

Please reconsider your designations for these areas. Wilderness, as oil, gas, CO_2, & coal is also a non-renewable resource, it can't be replaced once gone.

Sincerely Rick Morrell

123

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

AUG 8 1984

RECEIVED
Bureau of Land Management
AUG 13 1984
Durango, Colorado

Mr. Dave J. Miller, Area Manager
Bureau of Land Management
San Juan Resource Area
Room 102, Federal Building
701 Camino del Rio
Durango, Colorado 81301

Dear Mr. Miller:

In response to the letter dated April 1984 from Paul W. Arrowsmith, we have reviewed the Draft Environmental Impact Statement (EIS) prepared by the U.S. Department of Interior Bureau of Land Management for the San Juan/San Miguel Resource Management Plan. Our review was directed to whether the action described in the draft EIS involved matters within our jurisdiction by law or special expertise or had any potential impact on NRC licensed facilities. No potential effects were identified; therefore, we have no specific comments on the draft EIS.

Thank you for the opportunity to review the draft document.

Sincerely,

Richard H. Vollmer, Director
Division of Engineering
Office of Nuclear Reactor Regulation

122

WESTERN NUCLEAR, INC.

EXECUTIVE OFFICE
134 UNION BLVD
LAKEWOOD, COLORADO 80228
(303) 986-4571 - TELEX 45011-2

RECEIVED
Bureau of Land Management
AUG 16 1984
Durango, Colorado

August 15, 1984

David J. Miller, Area Manager
San Juan Resources Area
Bureau of Land Management
United States Department of Interior
Room 102, Federal Building
701 Camino del Rio
Durango, CO 81301

Re: San Juan/San Miguel Draft
Resource Management Plan/
Environmental Impact Statement

Dear Mr. Miller:

Thank you for sending the Draft Resource Management Plan/ Environmental Impact Statement (the "Draft RMP") for Western Nuclear, Inc. ("Western") to review and upon which these comments are based. We apologize for submitting these comments after the July 28, 1984 deadline, and hope that they can be considered without causing undue inconvenience. As you know from our previous correspondence dated March 7 and March 20, 1984, Western owns, leases or otherwise controls approximately one thousand five hundred (1,500) unpatented mining claims which are located either within or adjacent to the lands which comprise the Cross Canyon and Squaw/Papoose Canyon Wilderness Study Areas ("WSAs") in San Juan County, Utah, and Dolores and Montezuma Counties, Colorado.

The above-referenced claims were located both prior and subsequent to the passage of the Federal Land Policy and Management Act ("FLPMA"), with location dates beginning in 1970 and continuing through 1979, and some curative locations performed in 1983. Western has been conducting exploration work in the area since 1976, looking for uranium deposits with associated vanadium. The drilling results obtained have discovered several areas of mineralization which Western believes could be developed profitably even in today's depressed market. Western has elected not to conduct development work in these areas at this time for reasons which are unrelated to the potential viability of the deposits.

For these reasons, Western concurs with the Preferred Alternative proposed in the Draft RMP, insofar as the Cross Canyon

and Squaw/Papoose Canyon WSA's would both be recommended as nonsuitable for wilderness designation. Western is concerned, however, about the statement that these areas would be managed primarily for their "cultural resource values" (Wilderness Technical Supplement ("WTS") pages 1-5 and 1-7) under the Bureau of Land Management's ("BLM's) Interim Management Policy ("IMP") for a period of time sufficient to allow Congress to make the final suitable/ nonsuitable decision. The chart on page 1-36 of the Draft RMP, which lists the resource emphasis of alternative land uses in the WSAs and in which "minerals" are listed last in all three (3) WSAs in which it appears, bears out that the BLM intends to restrict and impede mineral development in these areas.

122-1 (153)

The IMP provides, as a general directive, that unpatented mining claims will be managed under the nonimpairment criteria, unless the claims had a discovery (under the "prudent man" test) on or before October 21, 1976, and unless the claimant's rights would be interfered with. If both conditions are satisfied, the claim is considered by the BLM to be a "valid existing right" and the impairing activities would be allowed, subject to the "unnecessary and undue degradation" standard. To be accorded such favorable treatment, the claimant must prove to the BLM that a discovery did, in fact, exist on October 21, 1976 and that the claim continues to be supported by such discovery. If there was no discovery before October 21, 1976 but the claims were actively being worked on or before that date, the claim and the work (along with its impacts) would be considered a "grandfathered use" and would thus be allowed to proceed "in the same manner and degree" as existed on the cutoff date. The IMP provides that the standard of "same manner and degree" includes a logical progression of the work (either geographically or in the type of activity) as long as the physical impacts are substantially the same.

122-1 (153)

Western believes that the effect of managing the WSAs primarily for cultural resource values and of placing minerals last on the resource emphasis lists will be to stifle mineral exploration and development due to the uncertainty and low priority afforded to mineral values. The goal of all mineral exploration is the discovery of, and the eventual ability to extract, minerals by the most economic and efficient methods. If a mining company cannot be substantially assured that it will be allowed to proceed to the extraction phase after spending large amounts of funds in the exploration and development phases of a project, the company will hesitate before investing its time, money and personnel in the area. The BLM has recognized the mineral potential of this area (Draft RMP, pages 2-9 through -11), and has adopted and publicly announced a policy of actively encouraging and facilitating the development of public land mineral resources by private industry (Draft RMP, page 1-9). Therefore, Western is unable to explain why mineral resources were consistently given such a low emphasis in the proposed manage

122-1 (153)

ment scheme. It is possible that Western is misinterpreting the BLM's objective, although the phrase "managed primarily for cultural resource values" seems faily clear and seems to indicate that minerals will not be accorded their full share of emphasis and attention. Therefore, Western requests that the BLM reconsider its resources emphasis for the Cross Canyon and Squaw/Papoose Canyon WSAs to make mineral development the dominant use.

122-1 (153)

Western also notes that the discussion outlining the environmental consequences of the Preferred Alternative on Energy and Minerals (Draft RMP, pages 3-54 through -56) does not mention locatable minerals and unpatented mining claims, and wonders whether this was merely an oversight. Also, in describing the locatable minerals portion of the affected environment (Draft RMP, pages 2-9 through -11), the Draft RMP concludes that uranium production is down and offers the decreases in price and exploration, and several mine closings, as support for that conclusion. While Western does not necessarily disagree with the conclusion, it is constrained to point out that the decline in production has little, if anything, to do with the occurrence or quality of uranium deposits in the area, and is more a result of foreign competition and the political aspects of nuclear power.

Western appreciates having the opportunity to comment on the Draft RMP and WTS. If you have any questions concerning any of the foregoing, please do not hesitate to contact me.

Very truly yours,

Charles W Brownman

Charles H. Brownman

CHB/bjd

cc: R. J. Heydenburg
G. Bogden

124

RECEIVED
Bureau of Land Management
AUG 27 1984
Durango, Colorado

Martha Nesbitt
908 Alpine, Apt 5
Boulder, CO 80302

August 20, 1984

Area Manager
San Juan Resource Area
BLM
701 Camino del Rio
Durango, CO 81301

Dear Sir or Madam:

I am writing to let you know that I strongly support all eight Wilderness Study Areas for wilderness protection.

There are several areas which I am particularly interested in. Webber and Menefee mountains provide homes for big-horned sheep, mountain lions, bear, and a winter range for mule deer. Cross Canyon and Cahone Canyon contain magnificent arches. McKenna Peak's beautiful badlands contain wild horses as well as a unique wildlife winter range.

124 (138)

I hope you will look carefully into the value of keeping all eight WSA's as protected wilderness so that my children will be able to enjoy the scenery and wildlife unique to these areas.

Kind Regards

Martha Nesbitt

La Plata County Fairgrounds
Agricultural Extension Building
Durango, Colorado

Monday, June 25, 1984

approximately 25 days following the hearing.

If there are any questions on the hearing procedure, we will answer them now.

Okay. We will begin the oral statements. When you come up to the podium as I call you, please state your name, address, and the organization you represent, if any.

Our first speaker is Henry Wright.

MR. WRIGHT: Thank you.

MR. FLINN: Henry, I am going turn this -- I've got a little egg timer here, I'm going to turn it on for five minutes for you and you can watch it and gauge yourself.

MR. WRIGHT: Thank you, my name is Henry Wright, my address is Post Office Box 2312, Durango, Colorado, I simply represent myself.

I have been to fair number of the areas here, but the one I would especially like to address is one that I visited for the first time just last week. Namely the Squaw/Papoose area.

I visited the area last Thursday with several professional archaeologists.

I think that the comments which I could make upon the Squaw/Papoose area would be applicable for practically any other areas, but again, the beauty of

the wilderness area is that there's always something out there to explore, there is always something new to discover.

It would seem to me that at least in the Squaw/Papoose area that there are a number of priceless resources, by priceless resources we are not only speaking of the ruins of which there is a considerable variety, of a number of different eras, but also such things that perhaps in the Southwest we are beginning to take for granted but we must not take for granted if we wish to keep our wilderness heritage alive.

These are such things as clean air, unscarred landscape, maybe even such things as looking at a landscape and looking off in the distance at a horizon line and not seeing it marred by power lines.

The only way that which we can hope to save our heritage, is to place it in some sort of a permanent wilderness area, and this would mean some sort of a place where it could not be taken in or out of wilderness simply at the whim of whoever the present -- whoever the present Congress may be or whoever the present President might be. This is a priceless heritage which must be saved for all. It must be saved for all of us, not only for those of us in this room, not only for those of us in the Durango, Cortez, or Dove

Creek area, but it must be also be saved for our children, and for our grandchildren.

And perhaps not even for our personal children and for our grandchildren, we must also keep in mind that there's a fair number of people who do not live in the Southwest, we must also save the heritage for people who live in places like Trenton, New Jersy, and Omaha, Nebraska, and Los Angeles, California. We must save it for their children and their grandchildren as well.

Thank you.

MR. CHAIRMAN: Thank you, Henry?

The next speaker is Clay Goldberg.

MR. GOLDBERG: My name is Clay Goldberg and I live at 564 East Second Avenue.

And I read just a portion of the Plan, and would like to just comment that any of these plans that I have seen implemented, whether it be City planning, or wilderness, or any type of these plans, be it recommendations, or actual law that they want to set down no matter how it's written down, it seems to be accepted as law in the future. And there seems to be very little in the plan as to how to evaluate this plan once it's implemented. I couldn't find very little language referring us to how to they're -- how we will evaluate this plan in the future.

DU-1 (41)

And I find it very necessary to protect the wilderness areas, or potential wilderness areas at this time, and to have an ongoing evaluation of such a plan so that we have a second chance to say, okay, we do want more wilderness, I have just returned from traveling extensively in Europe and Africa, and you can't believe how fast the wilderness disappears, and once it's gone, it's gone, there is no real second chance. So, what I would like to see in the plan is some way to re-evaluate the plan, and to give ourselves a second chance to say, okay, it could be wilderness again.

Thank you.

THE CHAIRMAN: Do you have a question?

MR. FLINN: No.

THE CHAIRMAN: Thank you.

The next speaker is Joe Pepi.

My name is Joe Pepi and my address is Box 614, Mancos, Colorado, 81328.

I would like to speak in support of designating Tabegauche and the McKenna Peak areas as wilderness, I think that these areas represent some unique wildlife and vegetation and landscape areas that are important to protect.

The wilderness -- I mean the resource area, over 90 percent of it, even with the designation of

it -- of these areas and the others that are being considered, will for the most part still be open to oil and gas leasing, and mining, and I would like to see these last -- these few areas protected. The other resource values of course have to be considered, but these areas are really unique, and they represent some things that need to be protected with all of the other land uses that are considered for a resource area are considered. As time goes by it seems there's less and less chance to protect the few areas of natural unaffected lands, and so, I want to say this against closing those areas that won't designated.

Thank you.

Can you hear, is this bothering you?

MR. PEPI: No, I can hear, it's kind of loud.

THE CHAIRMAN: Thank you.

The next speaker is Glenn Parton.

MR. PARTON: 2845 Florida Road.

Reagan and his administration are anti-nature. The pressure comes down from the top to kill wilderness and convert all public lands into sources of revenue, this is what the Durango BLM is doing. They will tell you that they are recommending about one-fourth of the acreage within the Wilderness Study Areas for wilderness designation, but the big picture is, that they control

almost 1,000,000 acres of land in Southwest Colorado. And after several years of reviewing all of this land, for potential wilderness designation, the result is the Dolores River Canyon area only, less than three percent of the lands, and this in one of the most remote and undeveloped areas of the country.

The rest we are told has manageability problems, conflicts with other values, or does not score high enough on the visual resource management classification process.

Such language serves the real purpose of the plan, mystification, the hiding of political decisions behind complicated bureaucratic procedures.

At bottom, the issue is simply that the profiteers, especially the oil and gas companies, are demanding free enterprise over all public lands, they fear wilderness designation because as it spreads, it means alternative sources of energy or worse still, it is a noneconomic relationship to the earth. And who knows where this might lead.

The energy companies perceive the threat and they take it very seriously, and this is why even small islands of wilderness must be cleared out of the way, so realistic and mature people can go to work.

The BLM agrees, this is the vicious circle we

are caught in, and it must be broken at the local level.

Thank you.

THE CHAIRMAN: Thank you.

The next speaker is Lory Campos.

MS. CAMPOS: Post Office Box 664, Grand Junction, Colorado.

I am here representing the 200 member Audubon Society of Western Colorado that is based in Grand Junction, and of course our main interest is protecting wildlife habitat and we would like to urge that the BLM reconsider and recommend all eight of your study areas as wilderness as it appears in your preferred alternatives that you are saying develop for mineral leases.

THE CHAIRMAN: Thank you, Lory.

The next speaker is Steve Gilsdorf.

MR. GILSDORF: I live at 702 Florida Road in Durango.

I got this little yellow thing here in the paper from the BLM Office the other day, and it says clear on page three, that BLM plans to develop approximately 810,000 acres for lifestock here, at estimated cost of a million dollars, and I thought given that you could have at least put out a little money for some beer or some'in for all of these environmentalists

here tonight, you know, it would be a nice thing for you to do, if you've got an eight -- if you've got a million bucks for the grazers you could have a little bit for all of the damn environmentalists.

Anyway, I am here to say a few words in favor of wilderness, especially desert wilderness, first of all I would like to compliment you men on selecting the Dolores River Canyon as being worthy of your indorsement as wilderness, I think it's a great area, it's widely used right now for recreation, and I want to congratulate you on that. There were seven other areas here that were not endorsed as wilderness in this plan, I think they should be endorsed and I encourage you to rewrite this plan, and include them. There are three reasons why I feel this way.

First of all, these areas will provide some off-season recreation. Anybody that lives in Durango, or really anywhere in this portion of Colorado realizes that tourism is a big part of the economy here, these areas will provide tourism if the off-season and in the shoulder season when there is no skiing, there's no backpacking up in the mountains or whatever, they'd be perfect for that.

Secondly, these areas would add to the diversity of the National Wilderness Preservation

System, if you look at the end of this Technical Supplement here, you will find a great deal about the wilderness areas that are in exsistence and the proposed wilderness areas in various parts of the West. The only type of pinon-juniper or canyon-type wilderness in existence right now in Western Colorado is 12,000 acres up in the Black Canyon of the Gunnison, that's what it says in here. That's a pretty long drive from Durango to go up there and be able to hike through the desert a little bit without motorbikes and jeeps running around. So, I think these areas would be a good part of that. You say in your study here that this is a valid and integral part of the evaluation for wilderness, however, you seem to ignore it throughout the rest of the document. In my mind, desert wilderness is a better representation of what the West stands for than most of the high altitude wilderness areas that are in existence in this State, to me, the West is wide open lands, it's arid country, these lands need to be protected and be saved.

And I don't think we can count on anybody else to do it, in the back of your document here you list all of areas out in Utah, well, when I talked to Bruce Flinn at the scoping meeting a few months back, he told me a little story about the San Juan County Commissioners,

they said that as far as they were concerned, in Utah, they would prefer no wilderness west of the Mississippi River. I don't think we can count on the Utah BLM to recommend any wilderness at all, so it's up to us here in Colorado.

The third reason I think we need to preserve these areas is simply that, preservation, these areas obviously have no great potential for resources, they have been sitting there for years and years, resources have been developed all around them, they still sit there, they have not been touched yet, they are defacto wilderness, they should be kept that way, just like Mr. Wright said, we need to preserve a little bit of the West for people in Omaha and New Jersy.

I want to take just a quick look at one example of what I thing is inadequate here and that's the Tabegauche Creek area up on Uncompahgre Plateau, if you look on page 2-4 of this document, where there's a little list of the mineral potential, we'll find that the mineral potential is low to moderate in this area, when the most of the west end of Montrose County was being bulldozed to bits in the uranium boom, Tabegauche Creek was untouched, it obviously can't have very valuable mineral -- minerals up there, secondly, anybody that knows anything about the geology of Western

Colorado knows that oil and gas is very speculative on the Uncompahgre Plateau.

Then turn over to page 2-40 in the document here and you will see the wilderness values listed, it has the appropriate size, it's 7,908 acres, it has naturalness, it has outstanding oportunities for solitude, it has the outstanding oportunities for primitive and unconfined recreation. It has supplemental values, geologic educational, scientific, and archaeological values. It's also a National Refuge for wildlife, and one of only a few pristine canyons along the Uncompahgre Plateau. This area has no lumber, it says on the next page, it has no pre-FLPMA leases, it has a hundred and fifty mining claims which apparently for uranium and vanadium, I don't think there's too much chance of that being developed in the near future, knowing the west end of Montrose County.

This area would provide all of the necessary ingedients to wilderness, it would add to the diversity of the National Wilderness Preservation System, it would be perfect wilderness, there's no conflicts, there's no reason why this area cannot be wilderness.

I looked all through this document to find a reason why there is none. Finally last night, I got the paper, and it says in here to quote Mr. Flinn, these

areas just don't qualify for wilderness designation.

That's why they can't be wilderness, because they just don't qualify.

I believe the this document is inadequate. If that's the only reason that can be given to me as why these areas do not qualify, the document is inadequate.

DU-2 (138)

I want to know why Tabegauche Creek cannot be wilderness, I want to know specific reasons why it cannot be wilderness.

I think most of the other units in this area are the same.

I think if you gentlemen have any integrity, whatsoever, when you rewrite the final Draft on this you will tell us why Tabegauche Creek cannot be wilderness.

In summary, I would like to say that I think the BLM must rewrite this statement including all the Wilderness Study Areas and recommending them for wilderness, they are all suitable for wilderness, they have little conflict with any other needs, especially Tabegauche Creek, they are all needed in the National Wilderness Preservation System, the BLM supposedly manages public lands, I own part of those public lands as citizen of this country, and I think I should get some benefits from them.

Thank you.

THE CHAIRMAN: Thank you.

Do you have any questions?

MR. FLINN: No.

THE CHAIRMAN: The next speaker will be Tamara Wiggins.

MS. WIGGINS: P.O. Box 3086, Durango.

I would like to quote from the current RMP from the glossary of terms, in the index part of the plan.

There's a term in there that the BLM calls impact dremation.

This is the definition of impact dreamation: the artful process of neorealistic airgrabulation of datum, and colonically projecting the ramifications of cosmic reality in an analytical format.

I am not real sure --

MR. SERING: We get real bored when we write these things.

MR. MILLER: At least you read it.

MS. WIGGINS: I am not real sure what that means, but I have my guesses. I must say I appreciate a good sense of humor, and especially in an official government document, however, I wonder if BLM in letting something like that get printed has let other possibly more serious errors go un-noticed. Or if whether the

BLM's recommendations are at all credible, if it's common practice to employ impact dremation.

The wilderness recommendations in this plan are a disgrace, that is because the government -- this government bureaucracy as well as most of the other government bureaucracy has it's funding and staffing priorities all wrong.

Decisions are arrived at by weighing political consequences, short-term profits, they don't look at environmental or long-term economic consequences, and if in fact we're managing public land at taxpayers expense, we better find out what the public wants and what the public things is important.

Wilderness is important, locally/nationwide the public has said so repeatedly, each of these eight areas we are looking at tonight are important, unique, ecologically unrepresented in our current wilderness protection system, they offer desert recreation opportunities, a chance to get out and hike in the spring and fall as opposed to the middle of summer in our higher attitude areas, the mountains and canyons are full of wildlife, Tabegauche is one of the only untouched drainages left on the Uncompahgre Plateau, McKenna's geologic formations are unique, they've got the wild horses. The main canyons that I really want to

support though, are the Cross, Cahone and Squaw/Papoose areas, they are rich in viperian habitat, they're threatened the most also, the ones I support the most and yet they have the most problems.

I think we all agree that we all need oil and gas, we all drive cars, we all have electricity in our homes, but these small pools of fuel out there in the canyons aren't even drops, not even puddles in the oil and gas reserves in the world, I don't think that we need to go in and disturb these small canyons, all around the mesa tops there's pipelines, there's Co2 activities, there's oil and gas, there's bean fields, there's chained areas, the canyons should be left alone.

BLM says that no, that there's manageability problems, they don't need a whole lot of manageability, all of the leasing red tape, reclamation, the forms, the processing, everything that goes with multiple use I am sure costs a lot more than managing these areas as wilderness.

The most critical area of management in these canyons is the protecting of the archaeological resources, that area is suffering from a pretty disgusting lack of funding and priority. Hundred sites per square mile the BLM says in some places, yet they'd rather let them be opened up to multiple use, more

roads, more pot hunters. Wilderness management is easy, just don't build any more roads, don't build any more trails, don't build any signs, keep the places the way they are, make the people work to get in and out. Those unable to backpack and bushwhack and read a topo map have a Mesa Verde, they have scores of other places to go, keep these little canyons intact.

I would make a suggestion here, and that's to get a ranger to go out there and watch for pot hunters with shovels and pots in their pickups, you could probably get college kids to go there and volunteer for the job.

BLM says, oh, but the canyons are in this plan, they are protected in this plan, they will stay intact, primitive, no major developments. They say that now, but then a few years down the road the situation, the manager changes, we are in trouble again. Defacto wilderness, it just doesn't insure protection. Chimney Rock is a good example of that, Forest Service, the National Park Service, both of those agencies have designated Chimney Rock as a protected area, now they want to go in and let strip mining occur.

BLM says the areas just don't qualify as wilderness. Wilderness is wilderness whether it qualifies or not, and this -- in fact these areas have

already qualified, that's why there's study areas. A lots of the other areas were already left out when they did the inventory, these eight were said to have quote, outstanding wilderness characteristics.

What I want to know is what qualifies a BLM bureaucrat to qualify wilderness, a heliocopter ride over them perhaps. I would else like to say since time in conclusion that the elimination of BLM wilderness coordinators job held my John Sering is indicative of the regional and national bias within BLM against wilderness, especially the desert areas.

The fact that most of Colorado's wilderness areas are suffering from over use is probably the best argument for protecting more areas, the crowded Dolores River rafting situation is a good argument for leaving more rivers without dams.

I would also like to say at this time something I don't think you addressed in the plan, if you have to go to a permit system on down the road for the Dolores which I see coming, I wish that you wouldn't give all of permits just to the commercial outfitters, there's a lot of small private users that want to have those permits also.

People want recreation, they want to explore the ruins out there, they want opportunities for

solitude, they want wildlife, they want uncluttered areas, uncluttered by signs of modern civilization, recreation is what keeps Southwest Colorado in business, recognize this BLM and change your wilderness recommendations accordingly.

I would like to say one more thing. I'm not -- I haven't really studied the coal, coal recommendations, I guess I'll say that in my written comments.

I am a little concerned over the grazing programs, or the overgrazing programs, say more about that in my written comments.

Thank you.

THE CHAIRMAN: Thank you.

Carl Weston.

MR. WESTON: Carl Weston, 3905 Highway 550, Durango.

I'm a wildlife and wilderness advocate and I think the BLM's conscientiously observed the traditions of the Interior Department and Management Plan as far as wilderness is concerned very closely resembles one of their Indian treaties of the 1800s. Apparently they're similar in intent and purpose.

Out of eight Wilderness Study Areas, only one, the Dolores Canyon has been recommended for wilderness

status.

Wilderness is not being equitably treated as a legitimate public use, it is being relegated to the one leftover area that is currently not in demand by other user interests, so much for resembling an Indian Treaty.

As custodian and manager of an enormus natural repository of Anasazi culture, without wilderness designation, BLM is failing to preserve natural unspoiled representative areas of ecosystems in which the Anasazi culture arose, flourished, and ultimately disappeared. To accommodate a shortsighted administrative bias against wilderness, they are trying to treat culture and ecology as separate unrelated issues.

I think that future scholars of Anasazi culture will justifiably condemn BLM management for in effect having been entrusted with the equivalent of a fine rare old manuscript and then proceeded to tear off the cover and throw it away saving only some of the pages.

Even without the special relationship to Anasazi culture, the pinon-juniper, desert/mesa type ecosystems should be represented in the total wilderness system inventory.

This is briefly addressed in some of the area

descriptions, but it is dismissed with the universal excuse that management resources are not available for management as wilderness, there's no explanation of why management resources are apparently available for the management of all other resources.

Excuses have been made for not recommending two of the study areas, for wilderness status, because of pre-existing gas and oil leases. The only solution suggested by BLM is that Congress could purchase the leases. This of course is the solution that would be easiest to frustrate and the least likely to be approved by Congress because of budget deficits. In the absence of any creative ideas from the BLM, I'd like to offer a couple of suggestions.

First, companies holding wilderness study area leases could be asked to donate them as tax deductible charitable donations for a wilderness area. The most they could say is no. And accept for the contingency that the area be made wilderness, Congress would not have to vote its approval particularly for separate funding appropriation.

Second, a plan to exchange these leases for leases outside the wilderness study area could be developed. Given the environmental constraints involved in building the roads and other ancillary facilities in

the wilderness area, BLM should be able to make an exchange proposition fairly attractive.

If after hearing public comment, the BLM still insists that one wilderness designation out of eight proposed study areas is a fair and equitable reasonable allocation of public resources, the public use, then I suggest that the same standards and criteria of fairness and equity be applied to the other users -- uses and users of BLM lands, so that all uses be allocated on the basis of allowing approximately one-eighth of the resource to be utilized. Which I understand acreagewise that would be closer to a fourth.

Management planning should be so amended reprinted with the introductory explanatory essay telling the public exactly how these standards of fairness and equity have been applied.

Thank you.

THE CHAIRMAN: Thank you.

The next speaker is Amy Westpool.

MS. WESTBROOK: Westbrook.

THE CHAIRMAN: Westbrook, sorry.

MS. WESTBROOK: Bad handwriting.

THE CHAIRMAN: That's what it says, pool.

MS. WESTBROOK: My name is Amy Westbrook, address is 6380 County Road 203.

I am here in support of wilderness, and I would hope that you would reconsider Squaw/Papoose and Cross/Cahone in your recommendation. These areas have a wealth of archaeological sites, they have ecosystems, such as the Sanoran desert area of Cross/Cahone, and they have varied animal life, such as the wild horses in the McKenna area.

These areas let us get away from the hectic pace of the world, and they keep our sense of adventure, you can walk around those canyons, and it's fun to look on the ground and find pottery and things that were left there years before.

If these areas are developed, those won't be any more, they won't be any different than a lot of other areas.

There is another reason I feel these areas are important, and that just like energy resources they are not renewable, so once we throw these open to various uses they won't be pristine any more.

The wildlife here will be greatly affected when they're -- whenever it opens, and some of these species may disappear, I feel that we need to acknowledge other life forms on this planet in these areas as well as ourselves.

Thank you.

THE CHAIRMAN: Thank you.

The next speaker is John Bailey.

MR. BAILEY: I live at 3543 County Road 223.

And I will be very brief.

I have arthritis badly enough that I will never get into another wilderness area I am quite sure, nevertheless, I write this letter which I would like to have included in the record, it's addressed to Mr. Miller.

Many good arguments for saving wilderness are already on record in these hearings so I won't repeat them.

There is one very basic principal which doesn't get the attention that it deserves from the BLM, or for that matter, from the conservationists. BLM standing policy should be aware of, and act with, a long-range view of land management.

This policy should require these wilderness acres as a minimum to be set aside for a simple logical and scientific reason.

We must leave at least a little undisturbed natural environment because in the next few hundred years, we will need to compare the relative success of nature left to ourself, with nature transformed by human economic greed.

If we don't have this comparison, future citizens will have no way of knowing when to change course or not, and what direction. It isn't a political question, it's just common sense.

Thank you.

THE CHAIRMAN: Thank you.

The next speaker is John Sanders.

MR. SANDERS: My name is John Sanders, my address is 385 Highland Hill Drive, Durango.

I represent the San Juan Basin Archaeological Society, we are a branch of the State Archaeological Society.

Our members have visited a number of the Wilderness Study Areas, we are very impressed by their unique character, we would recommend the maximum protection they can get, wilderness status I think is the least we can do.

We are very particularly impressed by the rich cultural resources, the density of archaeological sites in the Squaw/Papoose Canyon, Cross Canyon, Cahone Canyon area. We think that there may be management problems with these areas, but the management problems should be faced, we should do what we can to preserve them for ourselves, for our children and for our grand-children. We are also very impressed by the ecological diversity

of some of these areas, particularly the nearby Weber Mountain and Menefee Mountain areas, these are very unique. We would like to see these given the maximum protection.

I am speaking for myself now, not as a member of the Society, I am a professional geologist, I am very aware of the importance of finding new supplies of coal and oil and gas in this area, however, I think we have to set certain priorities. I think we have to make certainly sacrifices for the good of the future. And I think the benefits of preserving these eight areas as wilderness areas, certainly outweigh any small amount of oil or gas or coal that we might find on it tracts.

Thank you.

THE CHAIRMAN: Thank you.

The next speaker is Carolyn Bailey.

MS. BAILEY: I first want to express my appreciation for the opportunity that you're giving us to express our opinions, to the BLM on the proposed resource Management Plan, and I trust that staff members of the BLM both in the regional and the State offices are maintaining an open mind on these issues in the true spirt of a public hearing.

I am here tonight because in principle, I support wilderness designation for any and every area

that is still remains wild enough and is as yet unspoiled enough to qualify for wilderness designation.

Because of this philosophy, I was very alarmed to learn that the BLM only recommended one of the nine Wilderness Study Areas for wilderness designation.

And after learning more specific facts about these areas, I want to state my strong support that all of nine Wilderness Study Areas deserve wilderness designation, and the permanent protection that it brings.

I recognize that the BLM has a responsibility to the multiple use philosophy to serve a variety of interests as well as a difficult task of administering huge tracts of often remote land.

However, I feel that multiple use is not possible nor desirable for every parcel of land, and to me most of the areas that are still true wilderness remain so precisely because they are remote from human habitation, and do not possess sufficient mineral or timber resources to warrant their exploitation in the past.

In particular to the issues today, four of the Wilderness Study Areas appear to have negligible resource conflicts and possess significant wilderness values, and yet they have not been recommended for a

true wilderness designation. Not only are these four areas truly rugged and wild offering the traditional wilderness experiences of solitude and primitive recreation, but I also feel that they are an important national resource. First, because of their vast wealth of unstudied Anasazi archaeological sites, and second because of they're unique semiarid desert canyon and traditional ecological zone environments. These areas are as yet unrepresented and have been protected by our National Wilderness Protection System.

The four areas which I strongly recommend for wilderness designation and protection are the Weber and Menefee areas which offer the opportunities for local area residents as well as national and international visitors to experience this same environment in Anasazi cultural resources as to be found at Mesa Verde National Park, but in an atmosphere of solitude and discovery that's apart from the crowded tours and commercialization that you find at Mesa Verde.

I would also recommend Tabegauche Creek because it is the only pristine drainage of the Uncompahgre Plateau, with the rare undisturbed ecological continuum from semiarid desert to subalpine forests, and it also has artifacts from as many as five prehistoric cultures.

And the fourth area I would recommend is McKenna Peak, which is a diverse ecological area rich in fossils, varied topography from grasslands to badlands, and is important winter habitat for elk, deer and eagles, not to mention its own wild horse herd that lives there.

And then I also feel that although the remaining four areas have mineral exploration rights and potential for development, I believe they should be designated as wilderness and protected precisely because they do exist in an area that's surrounded by oil, gas, carbon dioxide, and uranium development.

Since they have as yet escaped destruction, I feel that they should be preserved for us and those that follow us to experience and show us what these areas were like before man's interference. These four areas include Cross and Cahone Canyons and Squaw and Papoose Canyons, and I feel that they deserve wilderness designation because all four of these canyons have some of the heaviest concentration of archaeological ruins in the United States, including pottery, rock art, walls and towers, and they also ahve varied ecological systems abundant wildlife and interesting geologic structures.

I feel that all of these eight areas should be given wilderness designation now to protect them from

the effects of population growth and consequent development that are inevitable for this area. Population increase will correspondingly increase the use of these areas not only from the sheer numbers of more people visiting, but also because the types of people that are leaving the big cities and moving to areas like Durango and Cortez are doing so in search of more wild and open spaces, and I am perfect example of this myself, leaving -- living in Durango now for five years after moving from the Front Range to escape the population pressures there, and before that, from the east coast.

I also wanted to say that I work as director of research and planning at Fort Lewis College although I'm not representing the college, but one of the main reasons that the students give for choosing to come to Fort Lewis is its location, and presumably the wilderness areas available here in this small town nature.

The college has an ever expanding outdoor pursuits program that actively utilizes the wilderness in the region, and the addition of these new semiarid deserts environments to the wilderness system would provide opportunity for wilderness experience for students during the late fall and early spring when the

higher altitude more alpine areas are unsuitable for visiting.

And I also wanted to say I am an artist and I paint the desert subjects much like the areas to share the beauty with others who are be able to come there themselves.

I feel that the Bureau of Land Management has a local, national and even international obligation to assure that these lands receive permanent protection so that they may be experienced, studied and enjoyed by those of us living today as well as future generations.

Thank you for your consideration of my views.

THE CHAIRMAN: Thank you.

The next speaker is Robert Gregorio.

MR. GREGORIO: I am Robert Gregorio, 4382, County Road 203, in Durango.

And I would like to go on the record as being in support of wilderness designation for all of these areas, I would have to say that probably the nicest places I have ever been have been wild places, in fact, it's kind of funny that we refer to them as wilderness areas, because I feel like their the most peaceful and tame places I have ever been. And when I go into a big city I feel like that's a wilderness.

I guess that's all I have got to say.

THE CHAIRMAN: The next speaker is Janet Weeth.

MS. WEETH: I'm Janet Weeth, Post Office Box 2013, here in Durango.

I'm speaking as private citizen, and as a local archaeologist.

BLM has held these lands in trust for sometime, for public ownership. We occasionally have to remind the present administration that it's not just ownership of the energy developers, it's not just the ownership of the ranchers, it's not just the ownership of the other resource developers, it's in public trust for all American citizens.

BLM has two land statuses, one is wilderness area which is going to have some sort of protection, and nonwilderness areas which will be opened for resource development.

Wilderness areas are supposed to be protected, although, we have seen with former Interior Secretary Watt, he advocated energy exploration in wilderness areas that already have been established and exist, and also, energy exploration in Chaco National Monument itself, as well as a proposal that was bypassed for energy exploration at Mesa Verde.

Defacto protection of these areas is no

protection. It is subject to the whim of the present administration of our government, and it's subject to change of BLM administration itself.

We have seen what such changes can do in areas such as Chimney Rock with the Forest Service.

As a private citizen, I believe that wilderness is very important. We need more wilderness rather than less. Our present wilderness areas are overtaxed.

Wilderness designation does not mean nonuse, these days it generally means overuse.

Anyone who has hiked up to Chicago Basin recently, anyone who has rafted down the upper-Dolores Canyon has seen the results of this overuse.

Only by providing more area can we spread out usage and reduce the impact.

We need to include in our wilderness areas not just high attitude wilderness, we need to include diverse environments, we need to preserve here in the West that particular wild wide open feeling of the West for our children that our forefathers knew.

Only by preservation of these desert areas as wilderness can we insure that our children will know the feelings that our forefathers knew.

As an archaeologist, I have particular

interest in five of the wilderness designation areas.

Weber and McPhee, for their association with Mesa Verde, a culture that we are only now beginning to examine closely and understand. At sometime we may be able to say that Mesa Verde itself, is the periphera of the Mesa Verde culture. Only recently have they finished mapping and doing an aerial survey of Yellow Jacket Ruin, a very large ruin, not far from Mesa Verde Park, which is larger than anything we have known to this point.

Also, Cahone, Cross, and Squaw/Papoose areas, because they are associated with the Utah cultures, as well as associations with the Mesa Verde area.

Archaeological resources are nonrenewable. Not many of these people here have been able to go into a remote enough area to find pristine undisturbed unvandalized ruins. And vandalism is occurring on an increasing basis daily.

You think you have management problems with the area now, put in some roads for energy development and you will see vandalism and management problems increase. BLM has this publication, a survey of vandalism to archaeological resources done by Nickens and others, one of the strongest correlations Nickens found was the association between vandalism and

proximity to roads.

It doesn't matter if you put locked gates on those roads, the fact that the road is there makes it easier for people to walk into an area and carry out things such as pots, because a road still provides easy access.

The Cortez area is notorious for its vandalism. Many of the people believe over there that the ruins are in their back yards and therefore they are theirs to exploit for money or whatever purposes they want to.

Re-education is beginning now but it's a slow process, and we have to preserve these areas until re-education occurs.

You say that you will manage it as a special archaeological area, but I would have you note, the amount of vandalism that's occurring in the Grand Gulch area at this time, and it's designated primitive area with no road access.

So people want to ask, why preserve, why are these important, why are these archaeologic remains important. But I believe these archaeological remains hold answers that we may learn from, and put to use at some later point. These people were dry land farmers. We are only now beginning to understand their water

management and crop management.

There are also many unanswered questions about these cultures, one of the theories now is that over exploitation of their natural resources, may have been one reason that they moved out of this area. And it's one of the current theories under investigation and examination at this time.

All I could say to BLM is if you open these areas to research development, and you allow roads to be put in, even seismic roads, you can see what is happening at Cedar Mesa in Western Utah, anyplace a road is put in, vandalism follows to the archaeological remains. And I can only begin to describe to you what its like to walk into a ruin that has not been disturbed, it's almost like feeling like Christopher Columbus, you're discovering something that you wondered, did somebody see this before and it's and amazing feeling, we don't have many of those types of frontiers left in this country any more.

Thank you very much.

THE CHAIRMAN: Thank you.

MR. SERING: I'd like to just ask a clarifying question.

MS. WEETH: Yes.

MR. SERING: Those people back in Washington

will be reading this in Congress, I think just a slip of the tongue, but when you said you're recommending designation of Weber and McPhee, did you mean the Weber and Menefee?

MS. WEETH: I meant Weber and Menefee.

MR. SERING: Okay.

MS. WEETH: I am sorry.

MR. SERING: That's fine. I didn't want Congress to think you were recommending a dam.

THE CHAIRMAN: The next speaker is Robert Muhlheim.

MR. MUHLHEIM: Hello, my name is Robert John Muhlheim, or R.J., and I live at 8 Pine Tree Way, Durango, Colorado. I am a U.S. citizen and official U.S. taxpayer.

Now, I live down water from Junction Creek, and I understand that on lands up there, the government policy is to allow a materials like S-1080 to be used to destroy the natural wildlife, one of which these animals is a coyotes. Now, there's lot of reasons some people think it should be used and a lot of reasons some people think it shouldn't, but I don't like my government putting a highly toxic water -- highly toxic poison into the watershed that I drink.

Because I think that that type of management

policy might end up being the death of us all, and eventually we might need some land that has been unspoiled by human hands. Science fiction talks about planets that have buildings that are seven miles above the surface, that's a minimum height, and only small areas which the galactic emperor may touch. Which the sunlight can actually touch the surface of the planet. Now, I see a lot more chance of that happening than more wilderness areas coming up. Because they not renewable.

We are talking about a management policy from bureaucracy that feels that satelite photos, mathematical models, can represent the experience of being in an unspoiled area.

Now, if we talked to any mother, chances are they would disagree if you said that the experience of childbirth can be adequately described by an aerial survey, or a mathematical model. And then a computer science that I hear, the main axiom is, how would you say it, GIBO, garbage in, garbage out.

And I seriously question whether the Bureau of Land Management is taking into the best interest the public. And the public needs. And if the lands of the world will ever have an untouched chance again.

Our governmental policies have generally been to bring near-extinction Native Americans and Native

American species, and given enough time most likely will go for all Native American flora, and fauna, you know. It seems strange at this point to talk about a society for the prevention of bulldozing and paving everything everywhere, but it is a great tendency. And I hope you seriously reconsider expanding your wild -- wilderness area designations.

Thank you.

THE CHAIRMAN: Thank you.

The next speaker Charles Butler.

MR. BUTLER: Charles Butler, Box 435, Durango. I am a local geologist.

I have heard your integrity and intelligence challenged here and I have read your report, I think you did a reasonable job, so, one out of a hundred here that at least sees fit to congratulate you on a good job.

There's been a lot of concerned voiced here about how best to protect the cultural values, and although as a geologist I tend to have a bias towards my own industries which are development of natural resources, I think I do share a common concern with many people here and in so far as the cultural resources are concerned. So the question that you have to face, and this Draft EIS and any modifications is how best to protect and preserve these resources.

I served for a year and a half on a committee that was formed at the request of Congressman Kogovsek. This committee met about once a month for this period of time, and it was composed of people representing a wide variety of public interest groups and users of the public lands.

The point I want to make here, is that after a year and a half of discussion, the group came to the conclusion and this group concluded, it was very heavily weighted with environmentalists, and people representing the -- a very high degree of professional knowledge about the archaeological problem out there, and it is a very real problem, because there has been vandalism in the past and still occurring. But the question was how best to protect these values, and their conclusions are summarized in this study, and the total report is available at the BLM office, I am sure you fellows have read it, but I advise you to reread it and to keep in mind its recommendations.

Now, the thing that they -- it was pointed out there is that even in areas like Cross Canyon and these small narrow canyons there are roads that come to the edges of these canyons, and if someone is going to vandalize those ruins, it doesn't take -- he is going to do it whether a wilderness designation or whatever,

because he can drive within about two miles of any of those ruins areas.

The question then is, what type of Management Plan would best protect the ruins, and the results of the committee study after a year and a half are -- was that a special Management Plan that's geared to the problems, not a wilderness proposal, but a special Management Plan was the best answer, and I am convinced that that is the best answer.

THE CHAIRMAN: Thank you.

Pat Temple. Pat Temple, 613 County Road 213, Durango.

I am speaking as a citizen, and taxpayer.

I would like to urge you to reconsider your decision to recommend only one of the eight areas as wilderness. In fact, all eight areas are deserving of wilderness status, there are numerous reasons for this as most have been stated tonight. I would like to add that that not only are these areas unique and delicate, but they're also appreciated by countless poeple now and untold people in the future.

Protection is really the problem and roads will make it impossible, I have seen that where I live in Bondad. There's poaching, there's everything, you just can't keep people out.

And as our population continues to grow and fewer and fewer people are able to buy land, the public lands are really going to be stressed. And parcels such as these are going to be needed to lessen the impact on existing wilderness areas. As keepers of our public lands and archaeological treasures, please exercise diligence and manage them wisely, by adopting a resource conservation alternative.

Thank you.

THE CHAIRMAN: Is it Jan Cathey.

MS. CATHEY: P.O. Box 1631, Durango.

I'm speaking as an individual who has done some hiking in the areas around the Cortez area in the narrow canyons, and you have the opportunities to experience relatively unscathed Indian ruins and petroglyphs, and have learned a little bit about the flora and fauna that are there. And I know that if we allow more accessibility, or companies to go in there and do mineral exploration that we are going to lose untold resources for people to experience something that is totally unique in this country. And I hope that at this time you will consider, again, the other seven areas that you have discussed this evening, just the fact that you have considered eight areas, and this area's commendable, and I don't want to see them get

turned away or get turned down at this time.

THE CHAIRMAN: Marie Rash.

MS. RASH: You got it?

THE CHAIRMAN: Do I have it?

MS. RASH: Marie Rash, 2051 East Second, Durango.

And I am speaking for wilderness. I believe it was Thoreau that said that in wilderness is the preservation of man and I think that that is one of the most important things we are looking at nowadays is the survival of man on a finite planet that the resources that we want will not get us very far along, maybe the resources in these wilderness areas would supply the United States with enough energy for possibly a day.

Wilderness are irreplaceable, extinction, I don't want to see that, I don't want to see extinction of man, and I just -- you know, I would just like to see more of the preservation and the beauty, you know, preserved on the earth.

Thank you.

THE CHAIRMAN: Thank you.

Glen Phillips.

MR. PHILLIPS: Thank you.

Mr. Chairman, members of the review board, and fellow conservationists and all concerned. I am a

member of the Colorado Mountain Club, a long time member of the Colorado Mountain Club, past president of the San Juan Chapter of the Colorado Mountain Club, and I am here to reiterate what's been said, I don't know, I think I could take up 20 minutes I suppose with my statement. I agree with perhaps a hundred percent of those who are for wilderness designation, I am not speaking officially for the Colorado Mountain Club or for the chapter that I formerly have been a president of, but I also think Mr. Butler offered a very cordial statement, his concern is somewhat of my concern, even though he is a geologist, I think that it is in the enforcement of the present principles whether they work the areas that we speak of or Wilderness Study Areas or designated as wilderness. I think that we could reach a higher state of protection, something we could be more confident of maintaining our wilderness, our unique areas, if we were assured, as the report that you have made seeks to assure us, that there would be continued and increasing amount of surveillance and enforcement of the present regulations that define these areas.

I love my open vistas, I love the wildlife, I love the plant life and unique wildlife of these areas. I think that the standing on McKenna Peak, you have unique experience and I stood on a lot of the 14,000

foot mountain peaks in Colorado, but McKenna Peak is unique. And the challenge of the mountain and even though it's not even one of the highest, is a unique experience.

The presence of green leaf manzanita in some of these areas in Western Colorado, to me gave me a thrill that I have no other -- it's not been comparable to any other emotion that I had. Here is a plant that's so rare, except in Western Colorado, and particularly in some of these areas, that I just wondered whether or not any kind of development in these areas would upset the balance and cause these plants which are so rare to be overcome. So, I think it's all been said, I'll just reiterate from the people who have stood up here and given their thoughts to the matter, and I urge you, in reconsideration of this plan, to think deeply about further reinforcement of the factors that will continue to give us this priceless resource and continue to protect the priceless resource that we consider as unique wilderness areas.

Thank you.

THE CHAIRMAN: Thank you.

Mr. Phillip was our last signed speaker. Is there anyone else?

Is there anyone else in the audience that

would like to speak? Okay.

I will start on that side of the room, if that's okay, and work across.

Please state your name and address?

MR. ALPER: My name is Mark Alper.

THE CHAIRMAN: Could you spell thank lasts name?

MR. ALPER: A-l-p-e-r. I live at 2051 East Second, Durango.

I have recently moved here from another part of the country, and I haven't had a chance to view many of these places. I am speaking as a citizen of the U.S., and as one of 4,000,000,000 God units on the earth.

To me, ideally, the goal for is to more fully appreciate what we have left, all of us. Unfortunately, the trend is to move more fully toward the dollar motive and if we succumb to this, then we're truly in trouble as a country, and as a race, as a species.

To continue to grab and grab and grab and not save and save and save, is to deny that heritage to our children, that are forefathers guaranteed us. And it will also deny our long range existence on this planet.

Support these areas, and go out and find some more. Please. Because, if we don't live with nature,

nature is going to live without us, and we can live in harmony, thank you.

THE CHAIRMAN: Thank you. Yes.

MR. SOPKA: My name is John Sopka, 1611 Forest Avenue, Durango. I think if you look at the situation, you really have to look at it with a broad enough horizon both in time and space, and that means not looking at it in terms of just one or two generations.

If you look at the exploitation of these areas, if you open up any area to mineral resource, gas, exploration, exploitation if you want, if these are heavily worked, or even normally worked, after one or two generations, they are gone.

Maybe three generations.

The beds are worked out, the resources are gone, what have you got left.

And in most cases what you will have left is nothing worth having, because it has been uncontrolled, and it has been used, with one demensional concept of usage in mind, you're essentially abdicating your responsibilities for the areas as you turn them over to commercial exploitation.

On the other hand, if you set aside the area as a wilderness area, and you preserve it, consistently, after 500 years you still have a wilderness area.

As contrasted with two generations, in which you gotten your use out of the land, and then you have a mess.

If you don't believe what you get, go look at some of the copper mines that are now being explored, what on earth you can do with those square miles of destruction, you can answer as well as I.

On the other hand, you hear arguments for saying that special management techniques maybe used to help preserve some of these areas. I submit to you gentlemen, that over the millennia, what has been very manifest is that the best protection of an area is that which nature has put up.

That by making certain places inaccessible, that very effectively disruptive machine called man, many areas are still in their pristine state, and unless you have have fairly good natural barriers, you eventually end up with a problem.

This business of saying that we in Washington are going to be able to devise special management techinques for controlling the usage of an area is a pipe dream. And I think if you look at history you will see that's the case.

I take you back about a hundred years, when there was a rather unusual natural resource in this

country called the Indian peoples. And we set aside in our great western European intelligence to preserve some of these people's cultures, to preserve the people, and we set aside areas so that they would not be imposed upon by the Caucasian, and European culture.

Loot at what's happened, 100 years later or so, we look back and say (the witness made noise with his mouth) we make an awful mess, and if you look at the history of that it's just been one management technique after another, a bureaucratic management technique coming out of Washington, and in some cases even laws, presumably, human, or rather Caucasian, Western European type laws, and what good did they do, we have a mess.

I submit to you, the you are now standing at a threshold in which you replace the Indian resource by the wilderness resource, and you propose out of your very profound human wisdom to now set aside management techniques that are going to protect those. I submit, gentlemen, that a hundred years from now you will say exactly what you have been saying about the Indians.

THE CHAIRMAN: Yes.

My name is Jennifer Carney, 950 County Road 204.

I am speaking for myself.

Did you hear all of that?

First of all, I would just like to say that I think this BLM statement overlooks the noneconomic public needs, and just the heavy usage in some of the areas like on the Dolores, or up in the Weminuche Wilderness areas, I realize that that's out of BLM's District, but that shows the needs and the desire of people in this country to have wilderness to visit.

And to cut down usage as someone else said earlier, you can just simply expand more areas.

The other thing I would like to address is that I grew up in a cattle ranching family in the Sonoran Desert, and of course a lot of land we used was State leased lands. And in those years, I discovered how multiple use doesn't necessarily work, although ranchers and people grazing the land do not intentionally destroy it always, they attempt to rotate their animals, and use the land properly, even still, where overgrazing occurs, other plant life will invade and it will change things, so, multiple use in the desert is just too fragile, and if we would like any left examples, of the desert environment, we need to protect things and specifically I am talking about the Cross/Cahone area and Squaw/Papoose.

Both of those are areas not represented anywhere in the Wilderness Preservation System, and I

think need to be included.

I don't need to address again the archaeological things, except to say that maybe that a lot of new techniques are coming out, and we have already lost a lot of the Dolores River area to what's been flooded by the dam and perhaps with some of the future technology that's coming up in archaeology, we will find out things, and if we don't have any sites left to preserve to protect it, then we won't have that opportunity at all.

So I think that the BLM needs to take another look at what they have got, I think you need to give the public specific reasons why you will not designate something other than to say it doesn't qualify, because it already did, as someone said, just so it was considered.

And we all here tonight would really appreciate reconsideration on this proposal, one out of eight is not enough.

Thank you.

THE CHAIRMAN: Does anyone else wish to speak?

I would encourage every one here to sign the entrance roster if you have not already done so.

The hearing record will remain open until August 1st, 1984, and written comments may be addressed

to the San Juan Resource Area Office, Bureau of Land Management, Federal Building, Room 102, 701 Camino Del Rio, Durango, Colorado, 81301.

The hearing is adjourned.

Thank you for coming.

(WHEREUPON, the following hearing was adjourned at approximately 8:40 p.m.)

EMPIRE ELECTRIC BUILDING
CORTEZ, COLORADO

TUESDAY, JUNE 26, 1984

At this time, limitation will be enforce so that everyone is treated equally, if time is available at the end of the hearing, individuals who are unable to complete their testimony, will be given a chance to do so, they will be called in the same order that they came up to speak tonight.

Written comments will be accepted in lieu of oral presentation or as supplements to the oral presentation. They will be submitted during the course of the hearing, or at any time on or before August 1st, 1984.

If written comments are not submitted today, they should be addressed to the Area Manager, San Juan Resource Area, Bureau of Land Management, Federal Building, Room 102, 701 Camino Del Rio, Durango, Colorado, 81301 If you need that address, just step up to the table at the end of meeting and try to get it -- we will try and write it down for you.

Any written comments received on or before August 1st, 1984 will be included as part of the official record. Written statements will be given the same weight as oral statements made at the hearing. For those who wish to make an oral presentation, it would be helpful if you would give the reporter a copy of any prepared statement you may have. If you have an extra

copy, please give it to her just prior to your presentation, if you do not have an extra copy, you may leave any written statement you might have with the reporter after your presentation. She has assured me if you will place your name and address on the statement, she will return it to you.

The record of this hearing will be available for public inspection at the San Juan Resource Area Office, Bureau of Land Management, Federal Building, Room 102, Camino Del Rio, Durango, Colorado, 81301, approximately 25 days following the hearing.

If there are any questions on the hearing procedure, we will answer them now.

Yes, sir.

UNIDENTIFIED SPEAKER: Who are these two people that are unidentified.

THE CHAIRMAN: Go ahead identify theirselves, but their staff from the Bureau of Land Management out of the Durango office.

MR. SINGLETON: My name is Ed Singleton, I'm a biological team leader on the RMP.

MS. BRANCH: Linda Branch, I'm the editor.

THE CHAIRMAN: Have any other questions? Okay.

Please begin your oral statement by stating

your name, address, and the organization you represent, if any.

Our first speaker is Jay Wayne Schmitt.

MR. SCHMITT: Yeah, let me back off for a minute and say that I want to offer a written comment later on.

THE CHAIRMAN: Yes, sir.

Again -- I might reiterate, a written comment counts, you know, I mean as far as providing information, we treat it as the same as an oral statement made tonight.

Okay. The next speaker would be Jerry Fetterman. Could you come to the podium please.

MR. FETTERMAN: My name is Jerry Fetterman. I live at P. O. Box 253, Yellow Jacket, Colorado, 81335.

I am here representing myself.

What I would like to comment on would be the proposed management plans for the critical area -- the enviromental critical area west of Cortez, for archaeological concerns.

Presently, the management is that they allow oil and gas exploration and development there, although there has been a heavy orientation to keep that development away from the canyons, it has been the policy, should I say, I think that is a real good

policy, because there inside the canyons there's a lot of sites that have not been vandalized, and studies by the BLM themselves have shown that roads and opening areas such as that tend to vandalize sites, tend to destroy them, it's also a good wildlife habitat and everything else like that. And in the Preferred Management Plan, the only thing I see that kind of relates possibly to that is the visual management -- visual management decisions, which is the same as has been going on for awhile, and I would just like to ask if it could be written somewhere in the management plan where it would be preferred or something like that, that no development happens in the canyons themselves, the mesas have been pretty well utilized by various forms of uses, and I think, you know, might as well keep ongoing utilizing those areas, but I think that canyon areas should be preserved. Thank you.

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Any questions?

MR. FLINN: Jerry, two questions I think, to help clarify, when you started out speaking about the area of critical environmental concern that is outlined in the plan for basically --

MR. FETTERMAN: Yes.

MR. FLINN: -- all the public land west of Cortez there?

MR. FETTERMAN: Yes.

MR. FLINN: The second thing is when you said away from the canyons, can you be more specific which canyons you have in mind, or is -- are you talking about all of the canyons in the general area?

MR. FETTERMAN: Basically all of the canyons, you know. The mesa tops basically have been utilized for oil and gas and stuff like that and I think, you know, there's roads and power lines and pipelines and everything on them now, and I think that should go on, you know, I think that would be good to allow that as existing oil and gas, but I would say that off the rims and into the canyons where it gets steep and it's difficult to do these kinds of things and it's difficult to do these kinds of things without making quite a mess and very hard to restore it to natural habitat and stuff like that, plus it's access is very difficult, in almost every one of those canyons, wehicularwise at least, so that cuts down on disturbances to the resources in those areas. Does that answer your question?

MR. FLINN: Thank you.

MR. CHAIRMAN: Thank you.

The next speaker is Richard Dudley.

MR. DUDLEY: My name is Richard Dudley. You need my address, don't you?

THE CHAIRMAN: Yes.

MR. DUDLEY: Post office Box 646, Mancos, Colorado, 81328.

I am a land owner in Montezuma County between two of the Wilderness Study Areas, between Weber and Menefee, and what I have to say is fairly short.

There are all sorts of words and numbers used to evaluate our public lands, unfortunately, most of them have to do with the amount of money a few individuals stand to make instead of what's best for the public interest and the earth's interest, in my opinion, we need more parcels of land with wilderness designation and less parcels sold to the highest bidder. I feel an obligation to future generations to leave them some of the treasures of this earth, wilderness is one of those treasures in my opinion. Thank you.

Any questions from panel?

MR. FLINN: No.

THE CHAIRMAN: Thank you.

The next speaker is Beverly Bradley.

MS. BRADLEY: My name is Beverly Bradley, and I live down Weber Canyon Road between Weber Mountain and Menefee Mountain, and own land adjoining Weber Mountain, no, Menefee Mountain.

What I would like to say today is in behalf of

a strengthening of the wilderness proposal to the -- to Congress.

I encourage you to add to the BLM's recommendations for permanent wilderness, the present BLM Menefee and Weber Mountain Ranges, having hiked in both of these areas and owning property that boarders Menefee Mountain, I would like to testify to their pristine qualities.

These areas are major migratory paths for deer and elk herds and house a number of coyote, bobcat, bear, eagle and mountain lion. Its isolation has been a factor in maintaining its unique environment. By insuring the quality of these lands, by adding them to the permanent wilderness list, we can safeguard them for future generations.

THE CHAIRMAN: Thank you.

The next speaker is Douglas Capelin.

MR. CAPELIN: My name is Doug Capelin. I live at 7850 County Road 41, which is Weber Canyon Road.

Resident of Montezuma County and I'm a land owner in Weber Canyon, I'm also a teacher and director of a fledging outdoor education camp/school called Deer Hill. I am here to state my concern over what I see as an imbalance in the BLM's Resource Management Plan, in particular, off-road use, and wilderness designation.

I can appreciate the need for balance in the BLM's Resource Management, there are a lot of different demands on the land of the BLM, but I do feel in these two areas the Plan is imbalanced. The percentage of land, some of which I think is very fragile, that the BLM would allow to remain open to off-road vehicles, I think is too high. I think off-road vehicles can do a great deal of damage to land that takes a greet deal of time to return to its natural state.

And I also feel that one out of eight is a poor batting average for recommending wilderness areas, I do realize that many of the recommended plans for thoe lands do involve a certain measure of protection, which I do appreciate, but I do feel that really the only sure safety for the preservation of the land for our children and all of the creatures that live in that land is a progressional wilderness designation and like I would like to state that I would like to see a greater number of wilderness areas that are under study be recommended.

Thank you.

MR. CHAIRMAN: Thank you.

The next name I'm not quite sure, Lou Matis.

MR. MATIS: My name is Lou Matis, I am a resident of Mancos, Colorado, I live at 45015 Highway 160 east of Mancos in Montezuma County, and

approximately three miles north of the Menefee proposed WSA.

In my statement I would like to address the -- some of the themes that the BLM addressed in their various alternatives, rather than dealing with alternative by alternative, I would rather touch upon some of the themes. The first of those is livestock management. I would like to see that continue at present levels. I think it is being managed well at present to increase the management, I think could cost competition with wildlife and also lead to the degeneration of some of the ranges due to the arid nature -- or the arid climate of the region. In other words, most BLM lands I feel is rather limited in its capacity for grazing.

In wildlife management, I endorse the Preferred Alternative which includes increased habitat for pronghorn antelope, 300 -- introduction of 300 head of bighorn sheep into the Dolores Canyon, the introduction of river otters into the upper-Dolores Canyon, protective oil and gas leasing, stipulation for eagle habitat, and several other items listed in the Preferred Alternative.

In wilderness designation, I am dismayed with the Preferred Alternative. The Dolores Canyon

definitely deserves wilderness designation, but along with it, I would like to see Cross Canyon and Squaw/Papoose Canyon included because of their adjacent nature. The two of them together would create a significantly sized wilderness area. The Mckenna Peak area also because of its wildlife habitat and its size also deserves full wilderness designation.

I would like to see wilderness designation or wilderness management for Weber, Menefee, Cahone Canyon and Tabegauche, I feel all nine areas, is that right --

MS. BRANCH: Eight.

MR. MATIS. -- six, five --

THE CHAIRMAN: Eight.

MR. MATIS: Eight, thank you -- do deserve some sort of wilderness protection, they are a small part of the total Bureau of Land Management lands in this region, and therefore should be preserved.

In minerals, on lands set aside or lands that are concentrated with cultural resources and wilderness areas, mineral leasing should be kept to a bare minimum, should be done with real strict regulations, and in some cases depending on the individual situation prohibited.

In other BLM areas, I would say that mineral leasing could go on, as present.

I do endorse removal of the land north of

Cortez for coal development.

The major reason I feel that mineral extraction does not need a real strong emphasis is that so often it doesn't contribute to the long-term stability of the region, but oftentimes creates a boom/bust type of situation. I don't think it should therefore receive strong emphasis, sometimes it's given the disguise as economic opportunity for a region, but so often as Western Colorado has experienced ever since its early development, mineral extraction takes a boom/bust type of cycle, and we need only to go to Grand Junction. In the years that I have lived in the Southwest, I know that Farmington has gone through at least four boom/bust periods, as oil and gas, and coal, all three would rise and fall.

There is a weak market for coal at present, so which needs to be taken into consideration.

Public land disposal, only in the instances where it will consolidate Bureau of Land Management lands or enhance existing Bureau of Land Management plans, should land disposal occur. There should be no selling of BLM land simply to get rid of it, and an effort should be made either to trade for a more idea piece of land or to consolidate and enhance existing lands.

Forestry industries and woods products are a minor product of BLM lands, and therefore should be managed in pretty much the way they are being managed today. Utilization for fence post and firewood should be permitted in a well regulated manner, however, heavy timber harvesting doesn't seem too practical because the areas are rather isolated and small.

And those are my comments, thank you.

MR. SERING: If I could ask one clarifying question on your statements regarding the wilderness study areas you wanted to see all eight wilderness study areas either designated wilderness or managed as wilderness?

MR. MATIS: Right.

MR. SERING: Can you clarify, are you asking these eight areas be designated by Congress as wilderness, that we recommend them, or recommend some other type of management and still protects the values?

A. Okay. The first four that I mentioned, Dolores Canyon, Squaw/Papoose, Cross, and McKenna Peak, I would like to see those at least in Congressional action, your recommendation. I would like to see the others, but, might compromise to say that the wilderness management would be adequate with that.

MR. SERING: Okay. Thank you.

MR. MATIS: But the ones most important for Congressional action would be the first four that I mentioned.

THE CHAIRMAN: The next speaker is Wendy Davis.

MS. DAVIS: Wendy Davis, Box 295, Mancos, 81328.

I'm here representing myself.

I appreciate the opportunity to comment on the Draft EIS and Management Plan, I would have preferred the resource conservation alternative be adopted, but I certainly wasn't expecting it. The Preferred Alternative has several aspects I would like to address.

I strongly object to the minimum percentage of the area open to ORV use being 79 percent, besides damaging indigenous flora and fauna, excessive ORV use incourages damage to fences which is irritating to cattlemen, the cows can't stay where they belong when gates are left open and fences cut, I have seen it happen a lot, ORV use shuold be restricted to existing trails only.

I would also point out that the BLM has designated a category of areas of peregrine falcon habitat which will presumably be protected and preserved. No such designation has been given to the

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areas adjacent to Point Lookout in Mesa Verde National Park, where the DOW has identified a peregrine falcon nesting pair. I request you check into it.

I am thrilled that the East Cortez KRCRA is not proposed for coal leasing, I commend this decision by the BLM and hope it carries into the final plan.

I am upset that only the Dolores Canyon WSA has been recommended as wilderness. Area BLM officials have stated that they have not been manadated by Congress to provide a diversity of ecosystems in the wilderness system, and therefore omitted Weber, Cross Canyon WSA's, which otherwise might have been designated wilderness.

It's my opinion that the San Juan Area Management could be more creative and more responsible and provide diversity without a specific mandate. I am the least glad that Weber will be managed as a defacto wilderness, no ORV, no -- all of those ways. But I would prefer the more long-term protection of official wilderness status, especially for Weber Mountain and Cross Canyon.

I would conclude by saying that I am disheartened that long-term fate of all of this land is being determined at a time when the political atmosphere is so conducive to resource utilization and so little

thought given to protection.

Thank you.

THE CHAIRMAN: The next speaker is Steve Davis.

MR. DAVIS: My name is Steve Davis. I live at Box 295, Mancos, Colorado, which is in Weber Canyon, in Mancos.

I am here to speak with the growing number of people who have come to realize that the true values of our public lands do not lie in how much short-term profit we can gain by drilling, cutting and digging from the land, many of us who live here are most concerned with the rural lifestyle, beauty, solitude, clean air, and water that can still be found here, but worldwide is disappearing at an alarming rate. We know all of these things are for more desirable -- are more desireable and important than the money that can be made from ruining these values.

This issue of exploitation versus conservation is a serious matter which more than deserves the public's attention, as well as those who are making the plans that deal with our resources.

I feel that the Draft RMP for our area strikes an uneven balance between those who see only profits from our BLM land and those who want to see at least a

good part of this land saved in its current unspoiled condition for future generations to enjoy. One example is the selection of alternatives that deal with off-road vehicles.

The present alternatives allow anywhere from 79 percent to 95 percent of the total San Juan BLM acreage opened to unlimited off-road vehicle use, there is no alternative at all for substantial reduction in off-road vehicle use.

The preferred Alternative for wilderness is even more out of balance with only one of eight WSAs recommended for wilderness. While I would favor recommendation for all eight WSA's, there are two, Weber and Menefee Mountains that I feel I must speak for because I know them the best. I do not favor the administrative protection that the BLM proposes, but permanent wilderness protection. This is the only assurance that we can have that these two small mountain areas will be protected for future generations. Lying between the desert and the high country, Weber and Menefee represent a very unique ecosystem that should be represented in our wilderness preservation system.

Habitat destruction is the largest crisis facing the wildlife of our planet, and this area is no different. Mountain lions, bobcats, bears, golden

eagles, bighorn sheep, all need wilderness habitat to survive, all of these species are found on Weber and Menefee and need and deserve our protection into the future.

Here in Montezuma County we have mass CO2 development, our largest river dammed, a huge 345 Kv electric line about to cross all three Mancos River canyons, one of the worst poluting power plants in it nation in Four Corners, a gas line going through our valley every couple of years, increased timber sales and increased economic development. Those of us who care about the beauty and natural values of our area, are asking the BLM to listen to us by saving some of these areas from future abuse.

Thank you.

THE CHAIRMAN: Thank you.

The next speaker is Cecil Burch.

MR. GUSTIN: Must be Cecil Gustin.

My name is Cecil Gustin. I'm from Dolores, Colorado, Box 270.

MR. FLINN: Excuse me, could you spell your last name?

MR. GUSTIN: G-u-s-t-i-n.

THE CHAIRMAN: Thank you.

MR. GUSTIN: I've been in this country ever

since I was a kid, came here as a kid. And I'm opposed against you, I will fight you, and I want you to know, that I would like to ask you, Mr. Miller, how many names it takes to oppose what we are going to do, will you answer now or later?

MR. MILLER: That is something I can't answer?

MR. GUSTIN: Okay. Then the oil and gas you talk about and these other people that you talk about, all of this money is -- comes off of the top, goes out your road, your health department, your counties distribute, your coal, is distributed, and I just can't see you people taking this land and doing what you want to do, you won't have any grass control, you won't have timber control, you won't have nothin', you look out in the wilderness area and now and see where they have it now, and there's trash, there's everything out there. I just I am against ya, I am against ya, and that's all I have to say.

MR. MILLER: Excuse me, could I ask a question. Clarify it, against everything?

MR. GUSTIN: No wilderness area, I'm not for it.

MR. MILLER: That's just what I am trying to clarify?

MR. GUSTIN: In your eight areas, wither one,

I'm not for them.

We needed -- we have been here all of our life, we stayed here all of our life, we've eat rabbits, we've eat beans, and we've been here and we fought for it and stayed here.

Now other people want to come in, fine, let you come in, we will take care of it, we took care of it before, didn't have no help. Now you people want to come in and help us, there's no way, we took care of it once and we'll take care of it again.

Thank you.

THE CHAIRMAN: M. T. Taylor.

MR. GUSTIN: I represent M. T> Taylor also.

THE CHAIRMAN: Okay. Do we have any more people signed up.

MR. FLINN: No.

MR. CHAIRMAN: Is there anyone else in the audience who wishes to speak?

MR. GUSTIN: I would like to come back just for minute, we will send a written statement in also.

MR. CHAIRMAN: Okay.

Anyone else wish to make a statement?

The hearing record will remain open until August 1st, 1984.

MR. MILLER: Excuse me.

THE CHAIRMAN: Did I miss one. You want to come back?

MR. DAVIS: Oh, just for a moment, just one other comment I didn't make was that I support your not leasing of the of the East Cortez area, but leasing in Hay Gulch and between Cherry Creek and Hay Gulch seems tomake more sence and since coal has already been dug there.

THE CHAIRMAN: Could you give us your name again?

MR. DAVIS: Steve Davis.

THE CHAIRMAN: Aanyone else wish to make a statement?

Yes, you may come back.

MR. MATIS: I omitted one thing too and that is the cultural resources. I think they should be managed for maximum protection.

MR. CHAIRMAN: Anyone else wish to make a statement?

Okay. The hearing record will remain open until August 1st, 1984, and written comments may be addressed, again, to the San Juan Resource Area Office, Bureau of Land Management, Federal Building, Room 102, 701 Camino Del Rio, Durango, Colorado, 81301. Now, again, you can get that address, it's written in your --

in a copy of the Management Plan, and/or you can stop up here and they can provide it for you.

This hearing is adjourned, thank you for coming.

(WHEREUPON, the following hearing was adjourned at approximately 7:50 p.m.)

NUCLA HIGH SCHOOL GYMNASIUM
NUCLA, COLORADO

WEDNESDAY, JUNE 27, 1984

procedure, we will answer them now.

Yes, sir.

UNIDENTIFIED SPEAKER: Yes, is this strictly comments to be made to wilderness, the Environmental Impact Statement covers a lot of other things, is this hearing limited to wilderness tonight.

MR. CHAIRMAN: No, sir, it's to receive comments on it entire document, wilderness included, it's just one the elements of the document. Do I have any other questions.

Okay. Please, whenever you come forward to make your presentation, would you please state your name, address, and the organization you represent, if any. Our first speaker is Tom Hale.

MR. HALE: When does the clock start?

THE CHAIRMAN: Starts now.

MR. HALE: My name is Tom Hale, I'm a San Miguel County Commissioners. Box 548, Telluride, San Miguel Courthouse.

And our concerns -- I would also mention Raymond Snyder, Commissioner from District 3, Norwood is here as well.

And he possibly contradict me later.

I would like to present for the record, a memorandum of understanding between the Board of

Commissioners of San Miguel County, and the BLM. Essentially what this document covers, is an agreement to try to coordinate our land use plan with your Land Use Plan, which I understand this is essentially -- maybe I can in light of this Exhibit "A". And we have some concerns along the Dolores River with the conflict with your plan, and what our plans are.

One, is at Slickrock, the way we read the plan, called for additional tourist facilities.

Some years ago, we granted a Land Use Permit for a multiple of uses there which we believe will address the needs for the rafters, and the tourists, and the local community, coming through that area.

And secondly, there is a proposal, as we read the document for a camping facility in the Anaweep (phonetics) Valley on the river, and we have already had in the past, some problems with parking along the road, and it's very remote from any other location, it's created problems for our Sheriff's Department.

And it would be of some impact during a high usage on the river to the Sheriff's Department. Which we feel is negative to the taxpayers.

And those are our two concerns, and also Dan Woodard is here from Slick Rock, one of the affected party members. And maybe that can be labeled Exhibit

"B". Have any questions on the effected land?

THE CHAIRMAN: This is just a copy of the letter.

MR. HALE: Ya, a letter and our original agreement with the BLM that we would try to coordinate. And I think there's some references in that that you would ask the County Planning Commission what their concerns are, and as yet, no members from BLM have talked to them on this issue. So, we would appreciate if you would approach the Planning Commission, and meet with the Commissioners on these issues and any other ones concerning our coordination efforts.

Thank you.

THE CHAIRMAN: Thank you.

The next speaker will be Raymond Snyder.

MR. SNYDER: I always end up behind, but that's seniority on the Commissioner part.

I am Raymond Snyder, San Miguel County Commissioner, I would support Tom's thoughts on this.

A couple of things that I have understood down there that the BLM would be building and possibly condemning private land for campers and parking places, picnic places, I personally would be very definitely against the BLM condemning private land for picnic, camp-outs, and these kind of things, especially when

private enterprise could do it. I would rather see private enterprise put up the parking lots, whatever it needs to be, and let the people pay for that uses it.

I would also like to go on record as supporting the Preferred Alternative of the BLM's Plan, now that is as an individual, and a BLM holder, and not as a County Commissioner.

I guess Tom, I didn't contradict you too much, did I.

THE CHAIRMAN: Any questions?

MR. FLINN: Ray, when you say in support of, is that for all of the different programs, I mean, there's a lot of programs there for coal and wilderness --

MR. SNYDER: Right.

MR. FLINN: -- wild horses and everything, and you know that's in place.

MR. SNYDER: Of course, you know, as an individual, I guess probably that I would be a lot more -- I would prefer no wild horses, I think have to have them in certain areas. And I feel BLM does a have a pretty decent Plan that can fit into most everyone's needs, and that is the reason I would support the Preferred Alternative of the BLM's.

MR. FLINN: Thank you.

THE CHAIRMAN: Thank you.

The next speaker is Mark Pearson.

MR. PEARSON: My name is Mark Pearson and my address is Box 204 Grand Junction, Colorado.

I am the Western Slope representative for the Colorado Open Space Counsel. The Colorado Open Space Counsel is the Colorado Statewide environmental coalition which represents -- or it includes civic recreational and conservation groups, there are 50 member groups, and that include about 30,000 people in Colorado.

I had a couple of questions just on the layout of the document. Some suggestions that I made to every BLM Office in the State, about how to make it more readable.

One is if at the top of every page you could put which Alternative you are talking about, and I know this is possible to do in your printing system, because the Billings, Montana RMP labeled the top of every page with which Alternative it was. It would make it a lot easier to find where you are going when you open up the document to look at it.

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The other thing is, I wish you would put the resources in alphabetical order, because the way they are listed now doesn't make any sense to me and it's real hard to figure out which way to go in the document

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when you open it up, if you want to go to another resource.

So those are just two printing-type things that if you could improve on, I would appreciate it in terms of reading it.

Well, we are not very pleased with wilderness recommendations in the EIS and we think it's inadequate in that respect since only one of the eight WSAs was recommended. I would like to request that in the final RMP when in comes out, not only the final wilderness suitability EIS, but the final RMP, that reasons be given for why every single area was recommended the way it was. As it is now, there's really -- you really have no idea why, for example, Tabegauche and McKenna Peak were not recommended for wilderness. You read the document and it describes in glowing terms everything that is wonderful about those areas, and then the conclusion is that they are not going to be recommended as suitable for wilderness, and it really looks as if the conclusions were written long before any of the analysis was done. If this were a high school composition, you guys would flunk, because your conclusions don't follow at all from the rational that's given in the EIS.

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I am also concerned with some of the

statements that I have heard from the BLM managers that some of the areas weren't recommended because they just plain didn't qualify or that they weren't outstanding. That's ignoring all of years of work that went into the wilderness inventory in the first place, they are identified as WSAs precisely because they had outstanding wilderness characteristics and they were the few outstanding wilderness candidate areas in Colorado. So to come back now and say that they just plain don't qualify is a real bogus argument and that's certainly one that we won't buy.

The inadequacy of the BLM's wilderness program is a nationwide phenomenon, and it has garnered the attention of Congress. I might remind you that last week the House Public Land Subcommittee held an oversight hearing on the BLM's wilderness review program, and the San Juan RMP, the lack of rational for the wilderness recommendations was one of the examples given to that Congressional Subcommittee. And the Congressmen were a little bit shocked at some of the things that were going on.

I would like to compliment the BLM for recommending the Dolores River Canyon, because it is without a doubt an area that should be designated wilderness, it is part of the national system. We'd

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like to see the Boundary and Coyote Wash extended up stream a ways and we would also like to see Nyswanger Mesa put into the area.

McKenna Peak is an area that is particularly suited, it's described as being unique, it's one of the few WSA's in the country that is on the transition zone from the Colorado Plateau to the Rocky Mountain ecosystems, you walk out and hike out in that Mancos shale adobe badlands and you go through some of the most desolate country in Colorado, and then when you climb up on top of the one of buttes, there's these cool wonderful Douglas Fir forests hidden on the north slope of those buttes, and you can sit even in a hot July afternoon, you can sit in those cool forests and look out over those really blazing hot adobe badlands, and it's an experience that you cna't find anywhere else in Colorado, if a few other places in the country.

And again, there really were no conflicts in the EIS stated with McKenna Peak, the oil and gas, all of oil and gas leases have expired without any exploration ever having occurred. Any uranium would be buried deeply underneath the Mancos shale and be pretty unfeasible to extract.

We're also concerned about Tabegauche Creek not being recommended wilderness, there's really no

reason given in the EIS again for that recommendation, and the only reason seems to be the fact that Montrose County opposed Tabegauche Creek, the rare two-piece of Tabegauche Creek in 1980 wilderness legislation, and as a result Tabeguache on the forest was not designated wilderness, well, you should read the Senate Energy Committee record that accompanied that 1980 wilderness legislation, it explicitly says that BLM should not consider any anything that happened on the adjacent Forest Service land when they make their wilderness recommendations. And if in fact is your reason for not recommending it, then you are really going against the intent of the Congressman that wrote that law and made that decision.

The reasons for dropping Weber and Menefee are lame, one of the great reasons given is that fact that they have pre-FLPMA oil and gas leases, only one of those leases has been explored before it has expired in the last five years, and all of the rest of those leases I would bet are going to expire without anyone -- ever any one looking for oil and gas. And since they are going to expire in the next year or two, that means in two years your reason for not recommending it will no longer exist and you will look pretty silly when you go to Congress without a reason.

Cross/Cahone and Squaw/Papoose have been left out also without any sort of imaginative or creative thinking on the part of BLM, you say that because they are pre-FLPMA leases you can't recommend them for wilderness, I would remind you that just across the State line in the Bisti Badlands, Public Service of New Mexico had coal leases inside of the Bisti Badlands WSA and they just exchanged those for additional or different leases outside the WSA. So the same think could be done with Cross/Cahone and Squaw/Pappose if you were really serious about what you say in terms of the wilderness characteristics out there and they are worth protecting.

That covers it for wilderness, I had some other comments on the other aspects of the plan.

On recreation, we support your designation of the Dolores as a special recreation management area and would like to see that improvements for recreational users put in, that would aleviate a lot of the headaches that are -- now exist out there.

N-4 (133)

Another recreation issue, we are concerned about the lack of range in the Alternatives for lands that are available for ORV use, indiscriminate open ORV use. And we think BLM should be designating all of its land as limited to existing roads and trails rather than

N-4 (133)

essentially designating all of it as open to ORV use anywhere.

By doing what the BLM is doing, in designating the entire area open to ORV use here, I think you are sending the wrong signal to the public, you are saying that public, you can go anywhere you please, on the BLM's land and we don't really care. I think you should be saying that public, we want you to stick to the existing roads and trails in almost every instance, and that maybe in certain examples you can go off of those, but our Preferred Alternative would be to stick to existing roads and trails, so we ould like to see that entire range reversed and flipped over so that more of the land is limited to existing road and trails.

On coal the BLM did a good job on the coal stuff in the RMP, we're glad to see the East Cortez KRCRA found unsuitable for mining because it is right there below Mesa Verde and any mining would severely impact the National Park.

We are also really glad to see that the BLM did its surface owner consultation before the RMP came out, that was a real good step that hasn't been done everywhere.

On the grazing actions in the Plan, the Plan doesn't have any spread in the alternatives for grazing,

the range condition in every single alternative is still going to leave about a third of the resource area in poor range condition.

N-5 (103)

There's a big spread in the amount of money that you are going to spend, but it doesn't seem to make much difference in terms of what is going to happen on the range out on the public lands, and we think the alternatives need to be revised in the RMP so that at least one alternative results in a substantial improvement in the range condition on the public lands.

None of these alternatives do that, at this point.

It's kind of hard for us to believe that you're going to spend a million dollars a year for the next 10 or 20 years and there is still going to be 29 or 31 percent, which means something on the order of 300,000 acres of public land in poor range condition, that's really astounding. Perhaps that lack of range in the Alternatives could be improved if you really seriously had analyzed the no grazing alternative. The reason that NRDC wanted no grazing alternative put in these RMPs so that there would be some sort of baseline for us to compare what is happening to the public land with cows on it versus what would happen if there weren't any lifestock on it.

N-6
(106)

It could be that because of vegetation and soils and rainfall, that a substantial fraction of the resource area would still be in poor range condition even if there weren't any lifestock grazing. But because you failed to do any sort of analysis of the no grazing alternative there's no way for us to gauge that. And we can just say that there shouldn't be any grazing out there and the range would be better, just as easily as you can say that the no grazing alternative wouldn't make any difference, so, if you would put one of these long-term changes in vegetation condition figures along with no grazing alternative, then we would be able to at least tell, you know, how much of the poor range condition is due to the overgrazing and how much is just due to the fact that there's Mancos shale out there.

THE CHAIRMAN: Mark, I'm going to have to ask you to hold down, you can come back at the end if want to?

MR. PEARSON: No, that is all I had to stay, I'll submit some written comments.

Thanks.

MR. CHAIRMAN: Thank you.

Panel have any questions?

The next speaker is Payote Cyote.

MR. CYOTE: My name is Payote Cyote, P.O. Box

820, Nucla Colorado. I'm wearing three hats tonight, it looks like a bandana, I know, but I have got a letter here from Lyman Thomas, vice-chairman, Montrose County Board of Commissioners, one from the Western Small Miners Association, and one of my own, I don't know if I am allowed extra time now, but I will read through what I have, and if not, I will continue after everyone else has had a chance to speak.

The letter from Lyman Thomas, vice-chairman, Montrose County Commissioners reads. Dear Mr. Miller, on review of the Draft San Juan San Juan/San Miguel Resource Management Plan, Environmental Impact Statement, I dated April, 1984, I found I must take exception to your Preferred Alternative, e.g., Wilderness Manageability Alternative for the Dolores River Canyon wilderness study area.

Although, I acknowledge the relative ecologic uniqueness of this region and its proven recreational value for rafting, I feel wilderness designation will broadly and in the long-term severely detract from the recreational, agricultural, and mining potential of this area which will eventually provide a negative impact on western Montrose County.

By withdrawing this area from mineral entry, the wilderness designation will deprive this country

from the proven reserves of minerals and natural gas, in the potential of the as yet undiscovered worth.

Further, it seems ironic, to say the least, to pursue the Wild and Scenic Designation for the Dolores River, which at one end is contained by the McPhee Dam, and at the other end manipulated by the Paradox Valley Salinity Project.

Because, as your study shows, forage species would be improved under the resource utilize alternative for grazing cattle, and it is my opinion as well as that of my constituents that the area would be best served under the multi-use concept maintained in the resource utilization alternative.

I recommend to the BLM that that alternative be the one that they chose.

And my second note is from the Western Small Miners Association.

It also is directed to Mr. Miller.

The Western Small Miners Association, based in Naturita, Colorado, with a nationwide membership representing over 100 small mine operators, has reviewed the Bureau of Land Management's San Juan/San Miguel Resource Management Plan, and Environmental Impact Statement and feels the Association would be remiss by not objecting to to the Bureau's Preferred

Alternative -- the of wilderness designation -- for the Dolores River Canyon Wilderness Study Area.

The Western Small Miners Association feels strongly that not enough time has been spent surveying the mineral inventory in the proposed WSA. For the affected mining and gas operations to implement their own survey of the proposed WSA, the operators would have to pay exhorbitant costs that are not now justified at present market conditions. However, the Association feels that if a more complete survey of existing and potential mineral and gas reserves is not undertaken, valuable reserves will be lost to this Country's future populations.

Association members are well aware of many mining properties and potential prospects within the proposed area, specifically the Bull Canyon, Wedding Bell and Wild Steer Mesa areas. Although, most of these properties are not being mined at the present time, due to the depressed market conditions, industry analysts are predicting a market turnabout in the future.

In general, Association members agree with the general goals of the Bureau in protecting the environment from unnecessary degradation. However, the Association feels that there are adequate to say the least, safeguards presently in force through agencies

like the Bureau of Land Management, the Colorado Mined Land Reclamation Division, the United States Army Corps of Engineers, the Colorado Air Polution Control Division, the United States Department of Energy, the Colorado Department of Highways, the United States Department of Interior, the Colorado Division of Labor, the Colorado Division of Mines, the Colorado Division of Water Resources, the United States Environmental Protection Agency, the United States Mine Safety and Health Administration, the United States Office of Surface Mining, the Colorado Radiation and Hazardous Waste Control Division, the United States Forest Service, the United States Fish and Wildlife Service, and the Colorado Water Quality Control Division, to name a few.

Therefore, the Western Small Miners Association feels that the best interests of the Nation and its people would be served under the Multiple Use concept inherent in the Resource Utilization Alternative.

Got any time left, I have one page.

THE CHAIRMAN: Five minutes.

MR. CYOTE: Next one is from me.

Dear Mr. Miller.

During the last 14 years that I have been a

resident of the west end of Montrose County, I have personally been involved in the following activities, either within or adjacent to the Dolores River Canyon Wilderness Study Area:

One, I delivered fuel and lubricants to operating mines within the Study Area.

Two, worked as a miner in a mine adjacent to the Study Area,

Three, worked in uranium/vanadium mill adjacent to the Study Area.

Four, observed the continual county road maintenance within the Study Area.

Observed lifestock grazing within the Study Area,

Observed several gas/oil exploration teams within the Study Area.

Followed the development of the proposed Paradox Valley Salinity Control Project both within and adjacent to the Study Area.

All of the above activities indicate to me that the BLM's Preferred Alternative designating the Dolores River Canyon as a wilderness area discounts the fact that much, if not most of the area under consideration is not now, nor has been in the recent past, quote, unquote, wilderness.

Also, as a part-owner/operator of a 400 acre canyon-bottom ranch similar in many aspects to the ecology of the area under study, I have witnessed firsthand the tremendous difficulties involved when a person, even with the aid of heavy machinery, has when that person does his or her level best to leave their mark on this kind of environment.

Further, I have witnessed firsthand how destructive, quote, mother nature, end quote, can be to the more or less, quote, virgin, end quote, environment when she is left to her own devices. Washed out farmland, roads and bridges, silted rivers, landslides and the destruction of wildlife habitat and lifestock forage too often result even in spite of ones best efforts to protect the environment for either public or private use.

In the BLM's Resource Management Plan instance after instance is recorded of how the wilderness designation for this area would only serve to degrade the environment.

Those reasons alone seem sufficient to me to oppose wilderness designation for this area. Therefore, I suggest to the BLM that the Resource Utilization Alternative would be -- would better serve all the immediate and potential users, including recreationists

of the Dolores River Canyon Wilderness Study Area.

Thank you.

MR. SERING: If I could ask just a couple of clarifying questions.

To help us, you mentioned that you helped when you delivered fuel to mining activity in the Wilderness Study Area --

MR. CYOTE: Yes, sir.

MR. SERING: -- can you state where that was in the Wilderness Study Area?

MR. CYOTE: Specific mine sites, or --

MR. SERING: Or general vicinity, like a mesa or canyon?

MR. CYOTE: Bull Canyon, Wedding Bell, Skein. I am not sure where the Picnic Ground Mine is. The Peanuts Mine.

I can certainly supply you with those.

MR. SERING: And in the same you mentioned that you witnessed county road construction or maintenance in the Wilderness Study Area, could you state where that took place?

MR. CYOTE: Again, to serve those same mines.

I am sure the Commissioner here can speak to that a lot more succinctly than I can.

MR. SERING: And in just the last question

again to clarify, you stated you witnessed gas and oil exploration in the wilderness.

MR. CYOTE: Seismographic.

MR. SERING: Was that with a bull dozer or heliocopter?

MR. CYOTE: Heliocopter and truck.

MR. SERING: Thank you.

MR. CYOTE: Sure.

THE CHAIRMAN: You want to leave us a copy of those?

You want these returned?

MR. CYOTE: No.

THE CHAIRMAN: The next speaker Jim Rosenthal.

MR. ROSENTHAL: My name is Jim Rosenthal, Box 676 Norwood, and I would like to talk on two distinct things.

First of all, this is just an area, I don't know, I'm a small land holder in Naturita Creek, and I am concerned that the areas directly south of Naturita Creek there is some areas marked for forest management under the Preferred Alternative, it's denoted J, and I have got an erosion problem down in the bottom of that canyon, part of my land is going to Utah, and it tends to go there when the low country melts primarily when the low lands are melting, and I would like to see that

N-7 (45)

area managed -- your notation would be RE, which is erosion management -- because it's when that lower area -- when the snow melts off that lower area, that's when we have the high water and that's when we have severe erosion problems in Naturita Creek, and that's happened two years running. Okay, that's the small personal portion for the area that I own adjacent to BLM lands.

N-7 (45)

Most of my comments I would like to direct toward wilderness hearing. I agree with what Mark Pierson said.

As many people know here, I am familiar with all of the BLM WSA's in this area, even from the air and on the ground since I have worked in the past for the BLM in wilderness management and I am also reasonably familiar with wilderness areas in general. Having spent a considerable amount of time in them.

And I support designation of all of these areas, as wilderness. We are looking at nation of 230 million people, and with tremendous population pressure and it's increasing every year, and wilderness study areas -- the wilderness areas that we have, to me serve two purposes, really, primarily, one of which is a basically ecological bank, I mean it protects animal and plant species from interference, gives us a base work where these arguments are well known, and the other one

is for recreation, some of the WSA's in this area are not very well suited to recreation which means conversely there're probably very well suited to ecological banks, Weber and Menefee are two that probably won't get much use into them, won't get much disturbance by people, and would -- if left alone as wilderness study areas and I think for that very reason because they provide very good habitat resource, should be designated as wilderness study areas.

The same would be true probably for Cahone and and lesser so for Squaw/Papoose certainly for Mckenna, I think that -- you know, again, we have wild horses in there plus other habitat, they're not horibly suited to recreation, but they'd be very good -- very well suited to, just, again, ecological banks, habitat. I particularly support Cross Creek, Dolores, and Tabegauche, you know, we just recently heard some comments that were opposed to the Dolores Canyon but -- and most of those were based on that persons economic incentives, I mean, he's associated with the mining industry, and that's his privilege, but we are talking about something that's national in scope, I mean, these are not just -- this area's lands, these are the nation's lands, and if you look at just this area and not consider the rest of the nation, what we have left

for wilderness there, those eight small areas are a meer pitance, I mean, we shouldn't be talking about -- we shouldn't even be arguing about preserving those, we should be saying, ya, well we will reserve those and now what others can we make in it wilderness or, you know, remove the evidence, because what we have is clearly inadequate, unless of course you view the future of the United States for the next 20 years, in which case that is fine, but if you look at a time frame of managing this land, managing the BLM, land, in perpetuity, then it's inadequate, we don't have enough.

Now, I support Cross, because it is -- it has certain good recreational values, it's a very pleasant place of all of the places, of all of the areas I went, and I I don't want to go into that much, I think there are other people that are going to speak in favor of Dolores, I strongly support your recommendation, I mean, certainly, the Dolores should be, it's very well suited to wilderness, both from -- well, by all criteria. You can get solitude there, easily, all of these areas you can get solitude when go there, it's wonderful for recreation. My strongest support for wilderness would be for Tabegauche, there are lot of slick rock canyons in the West, and I think it's the Windgate Formation -- is it the Windgate Formation that's through this area,

does anyone in the BLM know.

UNIDENTIFIED SPEAKER: I think so.

MR. ROSENTHAL: The Windgate Formation is a red sandstone formation which I think is exceptionally beautiful, it rises for hundreds of feet vertically and there's lots of Windgate Slick Rocks throughout the West, a lot of it in Utah, some of it by Colorado National Monument, after all, Colorado National Monument is preserved as a National Monument to my belief, I could be wrong, because it has these beautiful Windgate Slick Rock Formations, but we've got one right here in our own area, I would say in my own area, it's in the adjacent County, but, you know, this is the closest for me, recreational wilderness study area would be Tabegauche, but unlike many of the other Slick Rock areas in Utah, and many of the areas in Colorado, this has got a transition from an alpine ecosystem down to the desert, I mean, you are starting off with ponderosa. Most of Slick Rock canyons in Utah are desert ecosystems, and are beautiful but it's completely different, I mean, this one has trout, it has a live stream, that makes it unique, and makes it very special.

I know of one other WSA in this district that has a similar ecosystem, but there's none in this area, in this resource area.

So that gives two WSA's in this district which covers a fair portion of Colorado that have this potentiality of saving this particular ecosystem.

It's pristine, there's one trail through it.

I would like to add as an aside to that, we walked through about two Sundays before now, and the cattle had just been through, and I don't know what percentage level of their allotment they took in that area and whether they just trailed them through or not, but it looked really nice, I mean, you know, it looked as though it had been, you know, adequately grazed, but they -- the cattle hadn't trashed, they hadn't overgrazed it, and so whatever level that was, it appeared, you know, to be very, you know, I would certainly hope that they contine at that level, you know, they brushed a few trails out and made it a little easier for human passage, but, you know, didn't destroy anything at all.

Okay. The area is unique, it's beautiful, it's pristine and finally, it has some of the few really nice swimming holes in this area. Swimming holes where you can just go swimming in reasonably clear water without totally getting frozen at this time of the year are hard to come by, at least in my estimation, I mean, I have got a few in my little creek, Naturita Creek, but

you know they're small, and they are lovely. So, for those reasons, I particularly support Tabegauche, I think it's a travesty that it's not recommended, I think that it's -- should be recommended for wilderness, I mean, I have nothing -- I do not object to the management as proposed, it's not objectionable, you know, it's the next best alternative. But, you know, management on this level can change, I think we need, you know, given a different -- I mean, you know, I know a lot of people who are managing this area now and I trust the management, but management can and will change, I think we need the permanent protection afforded by Congressional designation as wilderness, for all of the areas, but most particularly, for Cross, Dolores and Tabegauche.

Thanks.

MR. FLINN: Jim, I have a quick question back to the original start up on the forest area in Naturita Creek, if you don't have some good legal descriptions you could get to us, would you mark up a map and furnish it to us later, so that we know exactly the area you are talking about.

MR. ROSENTHAL: Well, the exact area I am speaking of is the area directly south of Naturita Creek, from the stretch -- Naturita Creek runs east and

west and then it swings to the south, so it would be that area from where it swings to the south, and I think, if I am not mistaken, isn't that Mike Hills allotment?

MR. SNYDER: That would be primarily Mike Hills allotment.

MR. ROSENTHAL: Mike Hills allotment.

THE CHAIRMAN: Could you give it to Ed here or somebody --

MR. ROSENTHAL: Yes.

THE CHAIRMAN: -- rather than trying to mark up the map here, and it would be better than trying to describe it up here.

MR. ROSENTHAL: Right, but there's one description that's key, and that's McKee Draw. It's one of the essential elements in there, because when McKee Draw runs high it doesn't run a lot of water, but the points when it's running, the creek is already, you know, about ready to overflow the culverts and just the extra straw that breaks the camels back, and you know, one of the few things that can't be managed.

Okay. Thank you.

THE CHAIRMAN: The next speaker will be Dan Chancellor.

My name is Dan Chancellor, I represent myself

at the hearing. I have lived my entire life in Colorado, my family owned property in San Miguel County for over 20 years, and I currently operate a business in San Miguel County, so the outcome of these areas does affect me, I am not an impartial observer by any means.

First off, I have heard people refer to environmentalists as rich elitests and all, and I just wanted to clarify I'm not rich, I'm not an elitest and wilderness areas are one think that a person can do without being rich, the poor people can do, you just need pair of tennis shoes or hiking boots, or a sleeping bag, you can go do it forever, no money at all, you can do it when you're unemployed.

I remember this area real well as a child, and my dad would take me hiking and fishing up here, and now, I am having children myself, and I wonder what I am going to tell my own children if they take this area away, if take the wilderness away from us.

You know, the thrill of seeing eagles and hawks, and lot of things that you don't see just out anywhere.

Our children aren't going to have that if we take it away from them, and I think it's one of the greatest crimes that we commit to steal from your children to make yourself look richer, you know, it's

like robbing our children's piggy bank.

Recently I was in the Tabeguache Canyon and that area is strickingly beautiful, it's and incredible area, and I can't imagine mining coal there, or mining uranium or anything else, it's not -- it wasn't made for that. You know, I just don't see it.

Suppose that is about all I have to say, just let's think about the future, we can't be shortsighted about this, we'll be dead in 20 years, 30 years, and we have got to think about our prosperity of our prodigee and all.

That's all.

THE CHAIRMAN: The next speaker is Dan Woodard.

MR. WOODARD: My name is Dan Woodard from Slick Rock, Colorado, Box 7.

I am here to oppose the area you have designated for recreation on the Dolores River, or part of the two areas in particular, the Slick Rock area, and Gyp Valley area.

The Slick Rock area for obvious reasons I'm in business there, the business has been there for 22 years, and I hate to see my tax dollars going into a business to oppose me.

And we have camping, parking, restrooms, free

restrooms, water, free trash hauling, for the rafters, now, we think that is enough for that area, and of course I, the two Commissioners that spoke before me indicated that also and I want to thank the Commissioners for writing that letter in opposition.

Also I want to oppose the Gyp Valley area because of the rancher there that moves his cattle through that area at that particular time, during that time the rafters are going down the river, and that is the only area he can move his cattle through right there at the bridge.

I think it would be a injustice for him to have to wait especially when you people mandate the time he has to move his cattle. And the river mandates the time the rafters have to be there, so, it's -- the conflict is going to be there.

I also oppose the Wild and Scenic designation of the Dolores from Gyp to -- down to Bedrock, because of the mining in the area, and I -- the mining has been here for years and years, and I think that if you keep that within the river bottom, then that would be fine, but I would hate to see it taken into the top of the canyons where the miners have to make their living. We've been kind of short changed here in the mining industry for years, so I don't think we need to be

shortchanged any more, especially when we are using part -- or we're providing the tax dollars for you to oppose them or us, and that is all I have.

THE CHAIRMAN: Yes, sir.

MR. FLINN: You talked to the Wild and Scenic designation from Gyp to Bed Rock, do you mean the wilderness designation?

MR. WOODARD: Well, wilderness --didn't -- I thought that was State.

MR. FLINN: We're not opposing --

MR. WOODARD: Has to be used for wild --

THE CHAIRMAN: We're not opposing any Wild and Scenic designation on that stretch, there is the wilderness designation.

MR. WOODARD: Well, I even oppose wilderness, because I think that that would disallow the mining in that area to some extent, so, anything that would stop mining, that's part of our living, so, I sure oppose it.

MR. FLINN: Thank you. Any more of the panel have questions?

MR. CHAIRMAN: Thank you.

The next speaker is Bill Bray.

MR. BRAY: I am Bill Bray, Post Office Box 36, Nauvale, Colorado. I'm a livestock operator, and interested in water development in the San Miguel Basin.

I have been waiting ten years for this Environmental Impact Statement so that we could do anything in way of range improvements on our ranges, it has been real bad think for us, most of the alternates are not too far apart in range management except the elimination of grazing, which would be a disaster, I -- the preferred alternate probably has enough things we can live with, the complete utilization though of our resources in this area seem to me to be the prime interest and necessity of our whole area.

We are talking about this being a national thing, and the population of our country growing, but everytime we make a wilderness, we restrict the use of this big population of people we have. I am a man 71 years old, I and the contemporary to me are not -- most of them able to utilize wilderness area, if we have our jeep trails, if we have access to these pretty places, why, we can use them, but if they are strictly designated as wilderness, we're handicapped.

I think the BLM did a good job in eliminating all of these wilderness study areas except the Dolores Canyon, and I worry about the Dolores Canyon in particular, the Bureau of Reclamation is planning a deep well, injection well, to get rid of the brine of the Dolores springs, and as I study this map, I am not sure

whether it is in the wilderness designated area, or not, but it's very close, because they intend to go up -- south of the river from Bedrock quite a long ways to make this deep well injection. All of us in the area have been interested in getting rid of this salt in the Colorado River, and we certainly don't want to be handicapped. We oppose pumping this water into Dry Creek Basin and making evaporation pond, and now that the have decided that the most economical way to get rid of this brine is deep well injection, I would certainly hope that they would not be eliminated from going up south on the canyon, to drill this well.

I in general think the BLM in the environmental study has done a real good job, I -- we -- one of the faults is, that we don't see the money coming to do this range work, the man the that spoke about wilderness early mentioned that the range -- we need a lot of range work. Somebody is going to have to lobby Congress to get this range work done. Even under the preferred alternate right now, there is not money in sight do the work that is needed. So, I would like to have everybody conscious of the fact that we need all of the money we can.

The lower country areas, this McKenna Peak area that somebody has talked about for wilderness is

getting to be very heavy use by elk and it has band of wild horses there, that are causing a lot of damage, I question the value of 50 wild horses even in the preferred alternate. I think that anybody can see a group of wild -- of horses in anybody's pasture, they don't look any different than the ones that are so-called wild.

And I think that we're not properly utilizing our forage when we manage a heard of wild horses for no other reason I guess than visually to look at. So, I, with few exceptions, endorse the preferred alternate with those exceptions, I'd like to see the horses eliminated on the Spring Creek area, and the Dolores River Canyon not made wilderness or very carefully studied that it does not handicap the development of the area.

Thank you.

MR. CHAIRMAN: Thank you, Mr. Bray.

The next speaker is Robert Bray.

MR. BRAY: My name is Robert Bray, Box 65, Redvale, Colorado. I'm a local rancher with my father who previously spoke. I would like to go on record as supporting the Preferred Alternative, also, I would like to see that the Dolores River would not be designated as a wilderness, I feel that's detrimental to the public

and this United States, I think they have more recreational use, and more lifestock use, agricultural use, every part is better served under a multiple use concept.

I guess that's all.

MR. CHAIRMAN: Thank you.

Hershel Hendrickson.

MR. HENDRICKSON: Hershel Hendrickson, I'm a lifestock operator, Uravan, I run -- I have a ranch just below Uravan on the Dolores River. My address is Uravan.

I would like to talk pertaining to the wild horses, I think very few people that really realize that most of the wild horses in the State of Colorado today originated as a herd since I have in this State. And they lived here a lifetime that -- wild horses as such are not wild horses, they're just some horses that escaped some ranch, and propagated to the point where they'er becoming a nuisance, they're very costly to the range, they're very damaging, and I think that -- I don't know that they should be eliminated, but I think that they should be cut to very minimum number, wherever they are. They're not -- as such, they aren't wild horses, they are just domesticated animals that's gone renegade.

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The next thing I would like to think about or talk about is there's something being overlooked I haven't even scene a printed word on in this statement, and that is the old flume that's below Uravan, has a lot of historical value, and I think it should be at least preserved in its present state, and maybe a section or two of it restored as best it can be. I live around this flume, there's nine miles of it, and I think that probably at least three vehicles out of ten pull off the road and take a look at this flume, as I live around it, so I think its really got some historical value. As far as the Dolores River Canyon being a wilderness area, I personally to an extent am definitely in favor of it. I think we need some real wilderness preserves, as far as coal, oil, and gas, and this sorts of thing, when it becomes a time that it's necessary that we actually need that, when the nation needs it, and the world needs it, then I think it should be available but at the present time I don't think we are in that state.

Thank you.

THE CHAIRMAN: Thank you. Art Goodtimes.

MR. GOODTIMES: My name is Art Goodtimes. I am a residence and land owner in Norwood, Colorado, and I'm speaking for myself today. Box is 160 here.

Well after reading the Draft Management Plan

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of the EIS, had to feel as softball player that batting average for wilderness was pretty lame, one out of eight is not very much, and I understand you've heard testimony from a lot of gentlemen here, there are a lot of conflicts in usage and of course we understand that, there's no easy answer to trying to reconcile mining, grazing, and recreation values.

As a residence of San Miguel County though, I have to feel strongly that recreation has become more and more an important part of our County economy, you've both of our Commissioners speak -- speaking of the importance of private enterprise and not taking away an area and putting it into wilderness or into a designation that is going to deprive the private economy of being able to earn a living, and in Slick Rock that is certainly a problem, and one you should consider carefully. At the same time and by the same reasoning, it seems to me very important that if we are going to foster a recreational economy, and that seems to be the direction in which San Miguel County is moving, it's really important that we stimulate that economy with wilderness area, now wilderness -- one gentleman spoke and suggested to us that wilderness is not something that everybody can use, it's sort of like locked up and put away and notbody is there, but I don't think so, I

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was talking with the Commissioner Syder, he was mentioning when you declare a wilderness area, you do attract people, people come to that area specifically to see wilderness, this has been the case with the Lizard Head Wilderness, it's been the case with the Wilsons, it has been the case all over the country, and I think in our County and in the west end particularly where economics is a real important problem, I think it can only be an asset to this area to have the Tabegauche and McKenna Peak area declared wilderness, and I'm only familiar really with those two areas, and of the two, McKenna Peak I know less than I do about Tabegauche, the Tabegauche I have hiked a number of times and it's an amazing area.

I certainly feel that grazing should be continued in that area, and I think this wilderness designation would not substantially change the grazing in that area, it's an important asset too.

But I think and I have to agree with Mr. Rosenthal that when you're talking about wilderness areas, you're talking about preserving an ecological bank, you're talking about species, and -- of both flora and fauna that have adapted to as area, specific to that area, and everyday in the newspaper, and I am in the newspaper business, I see stories about different

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technilogical achievements, advances in science that occur because some strange little plant down in South America, some little animal is being used by the Navy for testing on various sonar capabilities, there's consistantly an advance in the biological world in terms of utilizing resources that we have put aside for a while for the long-term.

So I guess what I am saying is that wilderness doesn't have to be something that's nonuseful, I think it is useful for number of reasons and one of those is that ecological resource bank. I think it's a concept that you don't see in management very often, but it's one that really has to be considered. And there are a growing number of people both in the universities and in the rural areas who feel the necessity for preserving and setting aside areas -- when you look at this map, I think one of the things that we talked about is this map -- we're talking about a few select little area chosen specifically out of the entire resource area that we want to put aside for further study, I think that's what wilderness is. In the short-term its economic advantage, it's a wilderness attraction, in the Four Corners area, tourism is our largest industry I think, and wilderness will attract people, but in the long-term it provides the kind of resource that you can't have,

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once you take the wilderness designation away, once you destroy the habitat that's developed over centuries, you have changed that area and you changed often times the species adaption, sometimes knowingly destroying things, sometimes just changing them so they are no longer adapted in the same way.

Another point, and I guess having traveled a bit, I have to exception with one gentlemen who has certainly lived here a lot longer than I, and feels that lot of the older residents of this area by having wilderness designation in certain areas are cut off from those areas and I can sympathize with that, at the same time I can't help remembering the people in Switzerland who in their 80s and 90s were hiking all over the Alps, I don't think there's any real reason other than our own inertia that stops us from going into wilderness areas on foot, in fact it's much healthier for us, and so I really don't feel that's an adequate reason for no longer considering wilderness for certain areas just because people can't go there, people can go there, they aren't handicapped unless they have a physical handicap, our only handicap really is ourselves. And so I would have to exception to that attitude, the other thing is when you say wild horses are not useful to anyone I think there's a point of fact that I know Mr. Bill Coon

in Dry Creek Basin takes trail rides in those areas and it's an important economic resource for him to have the wild horses there. I certainly agree that the wild horse herd has gotten rather large, it definitely needs management, it can do damage, it has done damage to that area, I think a reasonable management proposal like you have made of keeping a herd of a certain size, perhaps 50, whatever seems appropriate, by I'm sure techniques that you have, I think that would be a good balance between the economic resource that people will increasingly use, I think trail rides and recreation, fishing, hunting, skiing in San Miguel County is only going to be the future for our area.

I think -- my only thing I would like to say is -- the last things I would like to say is that Dolores Canyon is of course a very beautiful area and i would certainly support that wilderness designation. When it comes to McKenna Peak, I'd have to agree that as a unique ecological environmental resource we really should set that aside, it's a small area, it's a little bit of a piece that we really haven't addressed in this country very well, and I think it's a piece that we should save.

As far as Tabegauche, I think it's an incredibly beautiful area. There's recreational values

to it, there's certainly cultural values to it, that trail -- the old Indian trail across the Uncompahgre Plateau is of course rich in archaeological artifacts, I was just talking with a woman in Telluride, Miss Betty Noice who participated in an archaeological dig there at 41 with Dr. Hurst and many of the artifacts from that dig are in exhibit as I believe or at least stored at Western State College. I really think you've done a lot in your plan in the Preferred Alternative to set that asside and I appreciate that, but I really think my feeling is that it deserves, it certainly is suitable to wilderness management and certainly deserves wilderness management, so I would really beg and plead with you to consider economic, scenic, cultural and recreational resources in designating the Tabegauche particularly, and the McKenna Peak areas as wilderness.

Is there any questions that you have?

MR. FLINN: No.

THE CHAIRMAN: No.

MR. GOODTIMES: Thank you very much.

MR. CHAIRMAN: Thank you.

The next speaker is Cheryl Keener.

My name is Cheryl Keener and I'm from Grand Junction, Colorado, and I am representing the members of the Colorado Wilderness Network, awhile back the

Colorado Wilderness Network established a program they called adopt a BLM WSA program, that program has met with great success, all of the WSA's in Colorado have been adopted, we have over 200 people on our mailing list.

We take trips into the WSA's each fall and each spring, and the eight WSAs within your planning area have been visited or adopted. I guess you can tell by now I'm going to talk about the most of the wilderness aspects of this plan.

My personal WSA that I have adopted is the Dolores River Canyon, I've also visited McKenna Peak WSA, Squaw/Papoose Canyon WSA, Cahone Canyon WSA, Cross Canyon WSA, Weber and Menefee Mountain WSA.

Naturally i was delighted to see that you have included Dolores River Canyon into -- or you would like to see Dolores River Canyon put into the National Wilderness Preservation System. I was equally disappointed to see that none of the other WSAs were included, or were recommended as wilderness. I think we can all agree that these areas are unique not only to Colorado but to the nation, and that they all do possess wilderness characteristics, otherwise they would not have been studies in the first place.

I think other people tonight have stressed the

wilderness characteristics of these areas so I won't go into those, I would just like echo the comments of Mr. Goodtime, Mr. Rosenthal and Mr. Pearson on all the areas.

One thing I am concerned about is the Cross Canyon, Cahone Canyon and Squaw/Papoose Canyons, I believe you have in mind for those an ACEC designation. I feel that that would not protect the archaeological sites, and that wilderness protection is -- or wilderness designation is the best protection for this archaeological sites, I also think it would be better for manageability purposes and I think it could be much easier for you to manage those areas as wilderness than an ACEC. One of the other concerns I had about the plan, I was reading along on page I, and I see that for grazing, in the long term, you were going to increase authorized lifestock use 13 percent, well, that sounds okay. I read in the next paragraph however, that the poor conditions sites would decrease from 39 percent to 31 percent, well again, that sounds okay, but then you think about it, 31 percent, that's a third of the range that's in poor condition, why are we increasing lifestock use.

And one of my last petty little points is the land disposal program. I've never been very comfortable

with the term land disposal program. You're pretty good about putting in parenthesis that that could be by exchange or sale or transfer. But I would just like to encourage you to exchange the lands as much as possible. As a member of the public, I'd hate to see our public lands just sold off, those are assets that we have, and I'd really encourage you to exchange or transfer those lands.

Thank you for listening to my comments.

MR. CHAIRMAN: Thank you.

The next speaker is Neal Reems.

MR. REEMS: My name is Neal Reems, Post Office Box 296, Naturita.

I don't have a prepared statement today, I guess I kind of got caught up and didn't get anything prepared.

I would like to speak for myself, and for the Board of Montrose County Commissioners, you have already heard from one of them. As an individual, I believe in the multiple use concept, I think it's shown a excellent track record and I think we that should continue with the multilpe use concept.

As far as the management plan, I think it's good. I have some small differences with it, but overall I think the management plan is pretty good.

As a County Commissioner in Montrose County, I find that any change in the Dolores River Canyon and in Tabegauche Creek would be in direct violation of our local land use control.

Now, land use planning is supposed to be the duty of the local officials, and if you change that, you're in direct conflict with what the Montrose County Commissioners have decreed for those areas, and the BLM and the County Commissioners discussed this earlier, and I just feel that land use control is a local issue and should remain a local issue, and the BLM or the federal government in any way should not come in, and change anything that has been done with local government.

Thank you.

THE CHAIRMAN: Thank you.

That was our last speaker that had signed up, is there anyone else here who wishes to speak? We've got one, any others? I will take you first and then you.

State your name and spell it please?

MR. PETERS: My name is Brian Peters, B-r-i-a-n P-e-t-e-r-s. I live on Wilson Mesa in San Miguel County, my address is Box 591 Telluride.

I want to speak in support of wilderness, the designation of the Dolores River Canyon, and express my

concern over the lack of designation for the other wilderness areas. Talking about a very small area that are being looked at for wilderness in this land, in the BLM Land here, in this area, and in the State, and in the nation. We are talking about multiple use, and all of the other land that is not been designated for Wilderness Study Area is multiple use. And wilderness provides a very special thing for many people to enjoy, and of all ages, and you know, I have friends that are older, that can get out and walk in those, and those areas when they aren't left in their pristine and in their natural condition, offer something that you can't get when the land is used in other ways such as when it's mined or when it's grazed, and I think that we need to have as much as possible of the wilderness to preserve for our future generations and for us now.

Thank you.

THE CHAIRMAN: Would you like to speak, please spell your name.

MR. BROWN: My name is Nicholes Brown. N-i-c-h-o-l-e-s Brown.

And I'm representing (SAOER) wilderness study group. We are in the area studying several of the wilderness WSAs in the area. And the Tabegauche wilderness, WSA, was one that we have been looking into --

we've got some people up there right now, and it's a beautiful area, and it is surprising that it didn't fall under the plan in getting included as a WSA, seems that it has many of the characteristics that might you might find in wilderness area, and it tends to represent a wild variety of ecosystems, and seems -- multiple use, tends -- would tend to exclude this area from future wilderness designation, the two just don't tend to connect there.

And wilderness can attract visitors, and the area it seems should try and broaden its possible economic base, with the possible wilderness designation, for one of these areas, in addition to the Dolores,. Seems that otherwise, that one is putting ones eggs in one basket, and that there's certainly not that great of hope in the boom and bust energy development cycles, and potential industries that are located in the area. And in our travelings around to various BLM and Forest Service offices, we found that -- gotten sort of inside story on a lot of things, and seems that ACEC designation doesn't really mean much, and stronger designation designations such as one of wilderness for Tabegauche and some of the other areas might be very desirable.

MR. CHAIRMAN: Thank you.

Does anyone wish to speak. Yes, ma'am.

MS. LANGTON: My name is Dannie Langton, representing myself.

N-9 (78)

I have two concerns, one is that in this document, cultural and paleontological values, and considerations are lumped together, and I really question that, because I feel that due consideration hasn't really been given to paleontological resources in this area. And I think there's several documents around that show significant vertebrae fossils have been found, particularly the Uravan area, and I imagine that in other exposures in the Morrison formation as well.

My other concern is that that I don't feel that ACEC designation actually protects areas, I know i'm reiterating what others have said, but I think that it tends to increase access and focus attention on an area that is given that designation, and I am particularly concerned with effects of such a designation on archaeological resources since it has been shown that the incidence of vandalism increases proportionally to their accessibility.

Mockingbird Mesa is a prime example of an area that's sort of gone to pot, and that is a direct result of increased accessibility. And I feel that wilderness designation for these areas does a lot more more to

protect the cultural resources by restricting travel to those people who want to go on their own power.

I guess I would like to go on record as being in support of wilderness designation for all of these areas, not only for the usual values that I think that they represent, but because they provide protection and perpetuity for some very fragile resources that aren't renewable. Thanks.

THE CHAIRMAN: Thank you. Is there anyone else wish to speak? Does anybody that spoke before wish to speak again?

Okay. The hearing record will remain open until August 1st, 1984, and written comments may be addressed to the San Juan Resource Area Office, Bureau of Land Management, Federal Building, Room 102, at 701 Camino Del Rio, Durango, Colorado, 81301.

Tell you what, if you really want that address, come on up front here and we'll let you copy it down, I know that is hard to read.

So this hearing is adjourned. Thank you for coming.

(WHEREUPON, the following hearing was adjourned at approximately 8:50 p.m.)

HOLIDAY INN WEST
COLFAX AT INDIANA
GOLDEN, COLORADO

THURSDAY, JUNE 28, 1984

701 Camino Del Rio, Durango, Colorado 81301, approximately twenty-five days following the hearing.

If there are any questions on the hearing procedure, I'll try to answer them for you.

Yes, sir.

QUESTION: Did you say that this was just on the wilderness, on the coal?

MR. BELISLE: It's on all resources covered in the land use plan, including coal and wilderness.

Any other questions?

Okay. Please, whenever you come forward to make your statement, would you please state your name, address, and the organization you represent, if any.

Our first speaker tonight is Harold Weissler.

You did have a prepared statement?

MR. WEISSLER: Yes, I did, sir.

My name is Harold Weissler, 2061 Mount Zion Drive, Golden, Colorado, and I'm representing the Colorado Native Plant Society. I am speaking on behalf of the Colorado Native Plant Society, a group concerned with conservation of Colorado's native flora. The Society was under the mistaken impression that several areas of important botanical resources within the San Juan Resource Management Area had been nominated by the Colorado Natural Areas Program as Special Management Areas. Having discovered

DE-1 (83)

in the Draft RMP that this assumption was incorrect, we have filed a formal, written nomination for Special Management status for three areas. These areas are Coyote Wash, which we recommend as a Research Natural Area; East Paradox Creek, recommended as an Area of Critical Environmental Concern; and, finally, Spring Creek, also recommended as an Area of Critical Environmental Concern.

Each of these sites includes rare plants or plant associations, and the Colorado Native Plant Society has no doubt that each easily fulfills the "importance" and "relevance" criteria required for Special Management designation. We, therefore, request the sites be so designated in the Final RMP. We will submit further information together with our written comments on the Draft RMP.

I thank you, sir.

MR. BELISLE: Thank you.

Does the panel have a question?

MR. FLINN: No.

Harold, we've already got a letter and map from them.

MR. BELISLE: You've got everything you need.

MR. WEISSLER: Thank you, sir.

MR. BELISLE: The next speaker is Kirk Cunningham.

MR. CUNNINGHAM: My name is Kirk Cunningham. I live at 68010 Tantra Drive, Boulder 80303. I'm representing tonight the Rocky Mountain Chapter of the Sierra Club, and we will have more extensive comments later. These are going to be fairly superficial, I'm afraid. In any case, we are interested in certain aspects of this management plan.

First, of course, is the wilderness aspect, secondly, the general land use protection of surface quality and so forth, and, finally, the minerals aspect.

According to several of our members in the resource area, which I've spoken to, they are concerned that the wilderness resource, the loftily established wilderness resource in that area is becoming increasingly in short supply, relative to the demand at the present time and also in the future. They inform me that tourist traffic during the summer in traditional areas like the Winnemuche and other areas in southwest Colorado are becoming pretty crowded, and that there needs to be more land set aside for wilderness use. Also, the archaeological resource in the area, as exemplified by Mesa Verde National Park, certainly receives a lot of visitor days. And, since there are other resources in that area that deserve protection, certainly there should be a high priority in your plan.

Not only are these areas being used in the

summertime, but, in other seasons, they may be unavailable for use or not--unavailable for use because of weather or other conditions like hunting, for example, for those of us who are backpackers. Therefore, there is a need in southwest Colorado for more wilderness lands for off-peak season use and also for wilderness designation for summer, a sort of protective designation for lands which are with archaeological resources. "Wilderness" is not a bad protection for that. At least it makes the access a little more difficult.

In this regard, we think that the wilderness recommendations are not only too small but also not very well justified. We feel that all the areas that are wilderness study areas today are worthy of wilderness status and wilderness recommendation from the BLM, although, of course, the protection that the BLM is proposing for them are better than nothing. And we certainly appreciate that. However, there is more--a better category.

In addition to wilderness and recreation, however, there are other resources that we are concerned about. The entire area of western Colorado--and this has occurred at other BLM management plans--has been considerably changed and even abused by white man settlers and so forth from the east through grazing, through road building, and other uses.

As an example, I was reading just the other day in a book entitled Arroyos & Environmental Change in the American Southwest by two authors, Ronald Cooke and Richard Reeves, in which they cite southwest Colorado as an area where extremely--extreme erosional features like arroyos have arisen. And they attribute this and other people who have studied the problem also attribute this to such land uses as grazing, which changed the vegetation and increased runoff and also road building and drainages which provide channels for water to cut into the layers of stream sediment.

For this reason, the general problem in the area requires an approach from the BLM that is aimed at protecting, reversing past damages, and bringing both the range and the condition of riparians up to a better standard.

There are two--there are at least two things that bear on this: first, of course, the amount of grazing that is allowed--and, although the BLM proposes to reduce the AUM's in the future, we feel that the maximum reduction would be the better one, from the point of view of restoring the range to its capabilities--but, also, we need to watch how we build roads and allow roaded use or off-roaded use, as the case may be. We want to keep roads out of stream channels. We want to prevent roads from radiating out from stream channels and allowing water to be channeled more readily into the drainage. And these two things together

would suggest that the AUM's should be reduced more than the 10 percent, which is the minimum amount, and, perhaps, 30 percent is a better figure and, also, that there be more restrictions on ORV use, perhaps kind of a zoning procedure or some sort of means of regulating that use so that the damage is minimized.

The third aspect that we're concerned about is minerals leasing, although the coal leasing program at 40,000 acres is relatively modest, and, since a lot of it is under private land, we anticipate that the BLM will not finally lease it. The oil and gas leasing, though, is proposed to cover 90 percent--97 percent of the acreage in the RA, and it seems strange to us that only 3 percent of the acreage in the RA has surface resources of such little importance that they should not be protected. Certainly, it seems reasonable to us to believe that archaeological resources alone would take up more than 3 percent of the area. And these have to be protected against even the surface disturbances of oil and gas operations. And, of course, that neglects other things like animal and plant life and so forth.

DE-2 (80)

We do not want to have a situation as we have in, say, the Dolores River Canyon where salvage archaeology is needed to recover whatever values is there. These things should be studied in a more deliberate way.

To summarize, we think that the wilderness recommendations are too low; that there are not enough protections for riparian zones and wildlife habitat that is associated with them; and that the acreage for minerals leasing is too high, especially for oil and gas.

Thank you.

MR. BELISLE: Thank you.

Does the panel have a question?

The next speaker--and I'm going to try this--is Nona Skumanich.

NONA SKUMANICH: You got it.

I'm Nona Skumanich. I live at 400 Thirteenth Street in Boulder. And I would urge that the following areas all be recommended as wilderness: They include Dolores River Canyon, the Tabeguache Creek, McKenna Peak, River, Weber Mountain and Menefee Mountain, Cross, Cahone, and Squaw/Papoose Canyons.

The parks in our country are used by millions of people, and those numbers are increasing every year. They're an important resource, and the citizens value them, and I think the BLM should be responsive to that, to our citizens.

What is special about Colorado particularly is our environment. That's why people come here. They come here from the east because the east is so overdeveloped, and

there are very few wild areas in the east. That is another important thing to consider.

Also, I believe that this is only about 1 percent of public lands that are being considered in some degree or another for wilderness areas, and that is such a small amount; it seems like it would be very easy to include that.

Finally, I'd like to say that I don't think that we can ignore our desert lands. They're very unique. They have their special life forms, and they're just as beautiful as many other areas that we have.

Thank you.

MR. BELISLE: Thank you.

I'll try this again. Mary Skumanich.

MARY SKUMANICH: Gentlemen, and Madam, my name is Mary Skumanich. I live at 400 Thirteenth Street, Boulder, Colorado. I speak for myself. I am an RN, Registered Nurse, but a housewife at present.

Tonight, I hope, along with others, I can persuade you to protect and support all eight wilderness study areas in your San Juan-San Miguel Resources Management Plan. At this point in time, I consider it crucial to saving all public lands. No land is, quote, good for nothing, unquote. With our population at close to 300 million and the human's penchant for developing--spelled

e-x-p-l-o-i-t-a-t-i-o-n--the land, it is important to, at the very least, save what we already have.

For an enlightened, rich, and visionary people, we have nowhere nearly enough wild and open spaces. All variety of land is of value to the human spirit. A small formal or informal park in the city is of equal value to the wilderness, the desert to the mountains, the plains to the valleys, the barren to the lush land, the wetlands to the sandy and rocky shores, the swamps to the rivers, the historical sites for our sense of continuity in our country, and the geological sites for our tangible tie to the beginning of our universe.

We have a responsibility to the world to save those areas unique to the USA just as other countries have. Also. But the USA must be the leader and inspire the others.

After four months out of the country, remembering the wealth and treasure in the diversity of our lands, I felt an urgency to return and help save whatever wild and open spaces and, yes, even those places good for nothing, because some of us see some very good things in those places, and so will the next generation. Tonight is my beginning.

That's the end of my formal comment. But I would like to bring to your attention a card that I have here to show you what Australia is doing.

"Dear Sir and Madam, Daintree-World Heritage, the Daintree Rain Forest Wilderness north of Cairns is the last large rain forest area in Australia. It is one of our few last costal wilderness areas. Its forests abound with unnamed species, and the coast has fringing coral reefs found rarely elsewhere. Yet, this area has not been nominated by the Federal Government for World Heritage listing. I urge you to use the World Heritage Properties Conservation Act and the Marine Park Act to protect the area."

So, I'm hoping that they will do that for us and we will do something for the rest of the world.

Thank you.

MR. BELISLE: Thank you.

Rocky Smith.

MR. SMITH: My name is Rocky Smith, and I live at 1030 Pearl in Denver. And I'm speaking tonight for the Colorado Open Space Council, which is also known as COS, and it's a Colorado statewide environmental coalition composed of about eighteen hundred individual members and about forty member groups for a combined membership of over thirty thousand people.

COS, since its inception in 1965, has been very concerned with preserving the last undeveloped spaces in Colorado, and that is why I am here tonight to speak for

COS on the fate of approximately a hundred and nine thousand acres of land that we feel are suitable for wilderness designation.

I'd first like to talk a little bit about the general need for wilderness. There are not many--very many undeveloped areas left. We need to preserve the areas that we have.

There are outstanding opportunities for primitive recreation, educational and scientific research, and scenic viewing and wildlife habitat, and, if we lose them, I think it would be a tragedy.

There is a growing demand for wilderness. The Draft RMP expected that there's to be a 10 percent annual increase for the demand for wilderness nationwide. Indeed, some of our designated areas are already overcrowded. So, there's a need for wilderness.

And we cannot create wilderness. It's there within designated areas. Once it's developed by man, it's gone forever, or at least a long time. We can, however, probably find the things that we have to, that we might also find in wilderness and we have to give up to get wilderness designation--we can probably find them elsewhere. But, wilderness, once it's developed, it's gone. Therefore, we feel that lands that are capable of wilderness designation should be so designated unless there are reasons for not

doing so.

Turning to the eight WSA's in the planning area, we find that all of them leading the BLM's documents have outstanding opportunities for primitive recreation, solitude, all of diverse terrain, and unique canyons, topography. There is a great deal of ecological diversity that would be added to the ecological preserves were these areas to become a part of the NWPS.

Also, there will be a season of use that is not generally represented in Colorado wilderness areas, that being spring and fall. Many of the designated areas are inundated by snow for seven or eight months of the year and basically unusable unless you're a hearty ski mountaineer.

In spite of all this, we are very disappointed to find there is only one area recommended by the BLM for wilderness designation. And what is especially disheartening is that there are no reasons given for nondesignation. I noted all the qualities--or that all the areas have outstanding wilderness qualities, but there are no real reasons for not designating the other areas. The documents do note that there is some problem with pre-FLPMA leases. But there is not a great deal of discussion of this other than to say that the ones in Squaw/Papoose and Cahone Canyon are unitized. The pre-FLPMA leases in other areas are not and are expected to

DE-3 (138)

expire within two years. This is so stated on page 2-4 of the Wilderness Technical Supplement.

Also, we would like to see more discussions of the pre-FLPMA leases. Where are they located? Are they located in an area where boundary adjustment could eliminate them and still there could--still, that area could still be capable of wilderness? What date were these leases unitized on? When will they expire? What is the likelihood of their development? We do not find adequate discussion of this in either the EIS or the Wilderness Technical Supplement, and we would like to see this in the Final, and we would like to see it presented to the public. We feel that the BLM has not done an adequate job in this regard.

DE-4 (50)

Turning to the areas specifically, the Dolores River Canyon is recommended for wilderness; I'm pleased to say. It is an outstanding canyon and has a unique ecosystem that would add diversity to the wilderness system, and we're glad the BLM saw fit to designate it and recommend it for designation. Tabeguache Creek we feel very strongly should be a wilderness area. There are unique archaeological values in this area. And, also, it is quite a mystery why this area is not recommended for designation, because, under the preferred alternative in the Draft RMP, there would be no surface occupancy stipulations in any leases. The area would be closed for

off-road vehicle use, and it would be managed as an outstanding natural area. We feel that all of these qualities make this area very capable of wilderness designation, and we feel it should be so designated.

It seems like the BLM is going for an administrative-type of protection, which is certainly better than nothing. But an administrative-type of protection can be removed rather quickly, whereas, a wilderness designation cannot. And, therefore, we feel that, to protect the areas like Tabeguache Creek, we would much rather see a wilderness designation. It is more permanent. It is more secure and will protect the outstanding qualities of this area.

Likewise, McKenna Peak and Menefee Mountain are also excellent candidates for wilderness. Both areas have unique ecological diversity. There is special diversity in both areas as noted in the Wilderness Technical Supplement.

Menefee Mountain has only one pre-FLPMA lease confined to the southwest--southeast part of the area, and, as it says in the RMP, any effects from development of that area could be confined there, under the preferred alternative. The Menefee Mountain will be closed for ORV use. It is not available for coal or oil or gas lease.

On the McKenna Peak there is a wild horse

herd, only two pre-FLPMA leases covering 1 percent of the year. There's winter range for deer, and there's excellent supplemental values from the badlands' geography and scenic vistas.

Both areas we feel should be in the wilderness system.

Weber Mountain we also feel is a good candidate for the wilderness. There's a few more pre-FLPMA leases. But it has some excellent bald eagle and golden eagle habitat and bighorn sheep habitat, something that is getting increasingly hard to find in Colorado. There are also some of the more important archaeological sites in Colorado. And the RMP notes that this area was treated as a primitive area in the 1979 land use plan and, under the preferred plan for the Weber Mountain area, no coal or oil or gas lease. And it is closed to RV's. Again, this is another outstanding area that should be in the wilderness system.

That leaves three areas, Cahone, Cross, and Squaw/Papoose Canyons. As the RMP and Wilderness Technical Supplement notes, these areas do have some problems with pre-FLPMA leases. But, as I said earlier, we would like to see some discussion of where these leases are and what is the likelihood of development and when they were unitized and when they will expire. All of these areas have really

DE-4 (50)

excellent wilderness characteristics, especially in the archaeological and cultural sites. There are many, many sites in all these areas, and it would be a shame to lose them if there is a way to preserve them through wilderness designation.

And, so, I would ask the BLM to hold off a decision on these until it is clear what is going to happen with the pre-FLPMA leases. If they are not going to be developed, we feel very strongly that these three areas should be in the wilderness system.

Okay. To close, I would like to sum up what we are going to lose if these areas are not put into the wilderness system. I've touched on all of these. We are going to probably lose quite a few archaeological and scenic sites--this is so stated in the EIS--because development will certainly uncover and probably destroy quite a lot of these in the process of development. Wilderness designation is an excellent way to protect these sites because it will limit access, limit motor vehicle access, and, therefore, keep--or minimize the chance of vandalism to these very important sites.

We also would lose a world of wilderness values that I mentioned in my opening remarks, the chance for outstanding primitive recreation, educational and scientific research, wildlife habitat, et cetera, and we

would also lose a chance to add to the diversity of the national wilderness preservation system.

Therefore, I ask the BLM to recommend for wilderness designation Weber Mountain, Menefee Mountain, McKenna Peak, Tabeguache Creek, and Dolores River Canyon WSA and to hold off the decision on the other three, Cahone, Cross, and Squaw-Papoose Canyons, until it is clear what will happen to the pre-FLPMA leases.

Thank you.

MR. BELISLE: Thank you.

The next speaker is Daryl Anderst.

MR. ANDERST: My name is Daryl Anderst. I live at 1620 South Clayton, Denver 80210. And I represent myself.

I've lived in Colorado for ten years and spent a considerable amount of time hiking and camping in western Colorado.

I would like, firstly, to express my appreciation to the BLM for their decision to recommend the Dolores River Canyon Wilderness Study Area for inclusion in the National Wilderness Preservation System. I feel that Colorado is privileged to have such a magnificent canyon within its boundaries.

While rafting the Dolores River a couple of years ago, I was delighted by the many colors in the canyon

walls. I saw browns, blacks, reds, whites, grays, yellows, greens, and purples. One of the reasons I enjoy the canyon country of southwestern Colorado so much is because it is so colorful.

After reviewing the San Juan-San Miguel Resource Management Plan, I would urge the BLM to change the preferred alternative to the resource conservation alternative because I believe that emphasis should be given to non-consumptive natural resource values. I give the following reasons for this: Decreased emphasis should be placed on the timber and grazing resources because of a poor cost-benefit ratio as evidenced by the subsidies given to timber sales in Colorado. Overgrazing by livestock threatens to seriously degrade vegetation and soil quality. I am concerned about reports that grazing allotments are sold at less than fair market value. Add to this the fact that livestock grazing is an extremely inefficient way to produce food, and the need for the grazing resource is negated.

Secondly, from an economic standpoint, emphasis placed on non-consumptive resources such as recreation could conceivably create more jobs than there would be available in a situation where consumptive resources are emphasized.

Thirdly, more than just one wilderness area is needed in the San Juan-San Miguel Resource Area because of

a rapidly increasing population and the concomitant increase in wilderness use. Colorado's population is expected to increase 60 percent by the year 2000. Across the nation visitor use in the national forest wilderness areas has increased by 36 percent, from 1980 to 1982. Also, there is a need for designated wilderness areas in Colorado that would provide a different season of use than the high altitude wilderness areas found in the National Forest.

I found it interesting that, in the Draft RMP, that the BLM seemed to recognize that at least some of the wilderness areas need a significant amount of protection, as indicated by its recommendation to close the areas to ORV use. However, the BLM is willing to give only one area maximum protection. I would urge the BLM to go one step further and give maximum protection to all of the wilderness study areas because they will be needed in the face of a mushrooming population.

I would like to thank the BLM for allowing this opportunity for public comment on this resource plan.

MR. BELISLE: Thank you.

The next speaker is Gary Brenner.

MR. BRENNER: I'm Gary Brenner. I live at 1305 Seventh Street, Boulder, Colorado 80302. I'm a citizen representing myself.

First of all, I'd like to thank you for having

this hearing in a location that was reasonably convenient for me to attend. It was only about an hour's drive. I appreciate it quite a bit.

I'd like to start off by pointing out that 93 percent of the land that you currently administer in Colorado is open for mineral development. And, as you know, wilderness designation and grazing are not incompatible. So, the trade-off, if any, is between mineralization and conservation.

And one of my main advocations is as an amateur archaeologist and paleontologist. And I've been very happy to visit many of the areas that you administer. I think that most of them are extremely well administered. Some of the places I visited are side canyons of larger rivers such as Coyote Wash and Grand Gulch. And I've been very happy to look at the archaeological sites that are there. And one of the things that has very favorably impressed me is the good condition that the sites are in.

Grand Gulch, in particular, has seen a lot of visitation from backpackers and other foot traveling. And one of the things that always impresses a visitor is that the pottery shards are laid out so that you can see them. They're not missing.

The only place in Grand Gulch where a significant amount of degradation has taken place is a place

called Turkey Pan Ruin. Turkey Pan Ruin was ruined by a group who went in with packhorses, picks, and axes and dug the place up. And, after talking to a ranger in the area, I've learned that they were able to get the horses close to their entry to Grand Gulch by taking nearby roads. So, the moral of the story is it is roads that seriously degrades archaeological ruins, not people. It's very hard to haul off very much stuff if you are on foot, and, once more, apparently, the people who go in on foot are not so inclined. So, I hope you bear that in mind when you consider the alternative between a wilderness designation and merely some sort of archaeological designation.

I would hope to be able to visit other areas that you administer like Squaw/Papoose.

And, since I mentioned that we have a possible economic trade-off, let me explore that for a minute. And I think that I can relate this to my interest as an amateur archaeologist and talk a little bit about the history of the Anasazi in this region. As you, I'm sure, know, there was a very high culture at one time which peaked around the year 1150. In fact, down in Chaco Canyon, the people built the largest masonry dwelling that was built in the western hemisphere prior to 1889 when a larger one was built in New York City. But, within fifty years of that date, about the year 1200, the entire canyon was deserted.

It remained a mystery for a long time how a culture would obtain its absolute height and then become deserted until, in 1982, in an area just outside Chaco Canyon National Historic Cultural Park, an area that is currently threatened by development, by the way, they excavated some ancient pack rat dens and, by analyzing the pollen, discovered that it wasn't a change in the moisture content, which has--you know, in weather--which had formerly been thought to be the decline of this culture, but, rather, the deforestation that the people themselves had produced that had caused a sudden decline of the culture.

In short, what had happened is that they had gone farther and farther for their resources, building their elaborate infrastructure to deliver those resources back to Chaco Canyon, and eventually crashed into an ecological disaster. They were miles and miles and miles away from their resources when it finally became untenable to go any farther.

I think, when you start exploiting these areas for mineralization, you are doing a similar thing. As I mentioned, you already have or someone already has 93 percent of the BLM lands in Colorado to work with. If the last 7 percent are going to make the difference between success and failure, then I think it's time to think of another way to do things. The last 7 percent is not going

to save us economically. On the other hand, this last 7 percent represents a hundred percent, virtually, of the archaeological heritage that we have in this area. And, for me, that's priceless.

So, I hope that you'll consider these trade-offs when you decide whether or not to designate these areas as wilderness.

Thank you.

MR. FLINN: Gary, a question quickly. When you speak of "Grand Gulch," you're speaking of the Grand Gulch in Utah, aren't you?

MR. BRENNER: That's right.

MR. FLINN: Not within this plan?

MR. BRENNER: That's right. It isn't in this planning area. The reason I spoke of that was simply as a reference to give you an idea of what happens when an area is managed for wilderness, when an area is managed for foot traffic. And I think the--I'll repeat what I said.

MR. FLINN: No. I understand. I just wanted to clarify that it's outside this planning area, the discussion that you were having about the Grand Gulch area.

MR. BRENNER: It is outside the area, but I think it's relevant.

MR. BELISLE: Thank you.

The next one is Merry Havens.

MS. HAVENS: My name is Merry Havens. I live at 1305 Seventh Street, Boulder. I represent The Indian Peace Group of the Sierra Club, which constitutes about twelve hundred members in Boulder County. And I'm going to address the wilderness recommendations in the Resource Management Plan/Environmental Impact Statement, even though it's only a small portion of that San Juan-San Miguel discussion in the book.

DE-5 (138)

I'm here out of concern for the seven wilderness study areas and the 264 acres that were left out and not recommended, the 264 acres of the Dolores that were not recommended for wilderness protections even though they possess outstanding wilderness characteristics. They are ecologically unique and worthy of permanent wilderness protection under the law.

Their archaeological value, in a lot of cases, will be threatened by increased vandalism that will probably follow by increased roads. The coal development in any of the areas that qualify for wilderness protection is not wise at a time when it has been determined that there is a glut of coal on the market. We're sacrificing wilderness that is irreplaceable. And coal is one of the least beneficial energy resources because of its link to acid rain, Black Lung Disease, and its vast irreparable environmental damage, especially strip mining.

The Tabeguache Creek provides a continuum of ecosystems from semiarid deserts to subalpine forests. I know you already know that. But those are some of the characteristics that we're concerned about protecting. McKenna Peak has shale badlands, unique transition zones from saltbush, greasewood, to Douglas fir, provides important winter range for wildlife, numerous fossils, and scenery that make it a natural choice for wilderness.

The Weber Mountain and Menefee Mountain provide important habitat for bighorn sheep, for deer, for the mountain lion, for bear. Cross, Cahone, and Squaw/Papoose Canyons provide a unique ecosystem of the Great Basin sagebrush, which is represented nowhere else in the entire national wilderness preservation system.

Restriction of access to these areas will almost certainly help to prevent vandalism. The plan provides such a small range of alternatives percentage-wise that, in essence, if we could give up only the few percent of lands developed for oil and gas and whatever, in the preferred alternatives, we could have all eight of the wilderness areas protected under the conservation alternative. And I think that the management protection offered in the Draft Resource Management Plan/Environmental Impact Statement begin to provide the permanent protection that is needed for wilderness. And, since wilderness use is

increasing nationally at a rate of about 10 or 15 percent, depending on where you get your figures from, we have a responsibility to increase wilderness available for public use, in lieu of losing what we have to overuse.

The BLM recommendations for the wilderness study areas, in most cases, are good, the no ORV use, the reduction of access, the limited development, the establishment of the Area of Critical Environmental Concern for the Anasazi Cultural Area. But this administrative management is much weaker and less permanent; it's subject to change as administrators change; and it just will not provide the protection that's needed under the wilderness preservation system.

I'd like to add that The Indian Peace Group would like to see continued BLM hearings in Denver so that there remains the chance to speak at hearings like this. We appreciate the opportunity to speak, and so close.

The Indian Peace Group will also be submitting further comments to your office by August 1st.

Thank you.

MR. BELISLE: Thank you.

The next speaker is Martin Walter.

MR. WALTER: My name is Martin Walter. I live at 3333 Nebo Road in Jamestown, Star Route, which is halfway between Boulder and Lyons, Boulder County. Getting

closer all the time.

I just have this little map out to kind of put things in a U. S. perspective. I could have made it look a lot worse by showing the wilderness areas that exist in the entire world.

The point of the little map there is that, in two hundred years' time, the United States has gone from virtually all wilderness down to 2 percent wilderness. The little black dots in the bottom map are, in fact, wilderness areas that existed in 1980. That doesn't mean it was Federally designated or had any protection necessarily, just what existed. And, presumably, the BLM wilderness areas are included in that.

And, to put it--get a little statewide picture of what's going on or what has gone on recently and how we got to these little areas that we're talking about today, I'd like to remind everyone that we start out with--in Colorado--with 8 percent of the area of Colorado under BLM management after a--this was after the Homesteaders and the miners didn't want it a hundred years ago, I guess. Of that--okay, we're down to 2 percent of Colorado was recommended by the BLM in its wilderness inventory, and it had to meet certain--like fifty thousand acres continuous and natural qualities and so on. The point is that it got cut down even further. Then, about the next step, we're down

to 1 percent recommended for wilderness study areas, and, then, across the state, we've been seeing a quarter of this percent recommended for wilderness designation.

So, I just--you know, it's no wonder that even the BLM sees lots of wilderness qualities in these areas. These are the jewels that are left in this area. And we're only seeing one of them being recommended for preservation.

So, I just want to put in perspective here that we have a dwindling resource. It's not getting any bigger. It's getting chopped up.

So, I won't go--since we're supposed to keep our comments short here, I won't repeat any of the technical stuff that Rocky Smith went into and some other people. I just would like to relate a couple of personal experiences I recently had.

The last two weeks--I guess, a week ago, I came back from a two-week trip that--sorry, I got out of the regional planning area here, but I was in and out of it, across the border a few times. And I just thought I'd tell you a couple things I saw. I saw some--since I covered about--thanks to a partly cloudy sky, I was able to cover about twenty miles a day on foot. Sometimes it was only ten. But sometimes I got up to twenty miles a day and not all in the same area, of course. And I saw huge areas of delicate

cryptogamic soil tromped to death by grazing, which is allowed in the wilderness area. Zipping across the border, I did a little trip up Davis Canyon outside the national park, and we see that that's going to be used--it's one of three sites in issue going to be used for a nuclear dump.

And I might remind you that there are many people that visit this area every year, and that's, you know, in this area. And 83--in a survey, 83 percent of these people said they wouldn't visit that particular area if there was a nuclear dump there. So, if you decide to put the dump there, you're going to see a lot more impact on neighboring areas, I would assume. And, so, therefore, I think that's a strong argument for preservation of these areas that are right across the border.

I also am not going to tell you where I found this, but, for the first time in my life anyway, I ran into an undisturbed archaeological ruin with some artifacts in it, which I left undisturbed. I took pictures of them anyway. And, for me, that was quite a kick. And I imagine--I've been looking around a long time for this sort of thing. And I think it's going to get harder and harder and harder to find these things as time goes on. And I think, if you just leave the resources that are in the wilderness, in fact, in those areas we have now, alone, don't build roads to them or allow roads to be built to them, that they'll stay intact

longer so more people in the future can get this thrill of finding an artifact or two that's been undisturbed, with no footprints all around it and--

And another thing, I ran into some German and Swiss people in some surprising areas. You expect to find them in Delicate Arch in Arches Park, but you don't expect to find them in non-national park areas, which I actually ran into a German student tromping around with his camera, in his gear for the water and so on. And I might remind you this is good for balance of payments. And, if we don't have any of these things, why would a German come all the way over here to see the same thing he could see at home? And he was amazed at--this one particular student was amazed at the variety and diversity of things that you could see. Of course, they don't have this sort in Germany.

And, in closing, I'd like to thank you for holding this in Denver, this meeting. The jobs--most of the jobs in the state are in the Denver area, front range, anyway, and the wilderness that lots of us work at our jobs so we can go visit them is elsewhere. So, I appreciate the chance to--I wouldn't be able to go to Grand Junction or any of these other places or--in an hour or so to visit, so I could speak my piece.

And I notice I haven't heard a ground swell of opinion to dig these places up. I guess they must have

already spoken to Uncle Bob, Burford.

Thank you.

MR. BELISLE: Susan Graves.

MS. GRAVES: My name is Susan Graves. And I live at 1841 Nineteenth Street, No. 1, Boulder. That's 80302. And I represent the University of Colorado Wilderness Study Group.

And we believe that wilderness protection is vitally needed in Colorado. Wilderness is a flexible plan for land contrary to BLM opinion. Wilderness recreation use is growing rapidly by about 9 percent per year just in Colorado. Other uses include wildlife habitat, watershed, scientific research, and historic values. Any one of these uses does not preclude the others, you know, like development. Only 7 percent of BLM's land in Colorado has wilderness potential. I don't see why this 7 percent must be opened to exploitation and development. Ninety-three percent is enough. Many wilderness study areas are not planned on for coal and oil and gas leasing or off-road vehicle use, and they do have unique value and are suited to wilderness designation. And we don't understand why these areas are not being recommended.

And, to digress a little bit, I just, two weeks ago, got back from a raft trip on the Middle Fork of the Salmon in the Main. And a lot of that is wild and

scenic river. And I've never seen anything like that. There was just bighorn sheep and mountain goats, bald eagles, golden eagles, western tanagers, a huge variety of wildflowers. And it was just incredibly impressive. And I really do think that we do need that here. And we urge the BLM to reconsider their recommendations and the values at stake.

These are public lands, and the public demonstrates clearly that they want more wilderness.

And I appreciate the opportunity to speak and you having it so close to us.

Thanks.

MR. BELISLE: Thank you.

The next speaker is John Stansfield.

MR. STANSFIELD: Some look at things the way they are, and ask why? I look at things the way they could be and ask why not? I'm John Stansfield, Box 588, Monument, Colorado 80132. I'm representing the Pikes Peak Group of the Sierra Club here tonight and our approximately 450 members in southeast Colorado.

DE-6 (138)

Why not? Why not? Why not wilderness recommendations for Tabeguache Creek, McKenna Peak, Weber and Menefee Mountains, Cross, Cahone, Squaw/Papoose Canyons? Why not? In our opinion, there's no reason why each individual area should not join the deserving Dolores Canyon

as recommended in the Draft EIS under review here tonight.

Each of these areas is unique in its wild state, in its land form, in its botany, in its zoology, unique not just for southwest Colorado but for the state of Colorado, and, even in a number of cases, for the region and the nation as well. As several people have already pointed out, from a national perspective, these areas are valuable. All of the wilderness study areas in the San Juan-San Miguel Resource Areas are, irregardless of their size, deserving of the full protection offered under the Wilderness Act, for they encompass wild resources important to our nation.

To be specific, with comments based on my experience and experiences of members of our group, we feel that Tabeguache Creek is distinguished in wildness by its diverse vegetation in a transition zone. Recreation opportunities and solitude exist to a large extent due to the canyon itself and to the creek which flows through it. Given the proposed protections offered by the Bureau, we asked why not wilderness?

McKenna Peak. McKenna Peak holds diversity of vegetation, wildlife habitat, and especially winter range. Opportunities for primitive recreation exist here, and, most definitely, opportunities for solitude abound in McKenna Peak. Why not wilderness?

Weber and Menefee Mountains include valuable

wildlife habitat, ponderosa pine vegetative association rare in Colorado wilderness.

The contiguity of Weber Mountain to Mesa Verde National Park and the park's very limited designated wilderness offers a fine opportunity for compatible wild management between management agencies. I personally feel a tremendous potential exists here, tremendous solitude, and a strong sense of the primitive in this area.

Stepping beyond the clear cuts on the northeast side of Weber Mountain, from the mined area, from the area that was burned and salvage-cut, into the forest, on Menefee Mountain, is like stepping through a door and closing a door behind you. All of a sudden the deer are running in the trees; all of a sudden the area is wild and has--as I said--has a strong sense of the primitive as it must have been for time immemorial.

Cross, Cahone, Squaw/Papoose Canyons. We feel that wilderness designation is wholly compatible with special archaelogical protections proposed by the Bureau here in these canyons. In fact, "wilderness" would--would add additional protection to these areas which contain very special wild resources.

Although it's difficult to determine from the Draft EIS the extent of the existing resource conflict between wilderness and oil and gas, it is our belief that the wild

and archaelogical values of the area far outweigh potential values from development and that Congress should be the final arbiter of any trade-off in values made here. Because these WSA's contain all the requisite assets to be considered, to be recommended as wilderness areas, we feel they should be recommended by the Bureau, making Congress the arena for a decision.

Yes or no on wilderness?

Finally, we strongly support the recommendation of the Dolores Canyon WSA for wilderness designation. The area is important for its canyon and, of course, the river that sporadically flows through it. We have found that the canyon--the canyon also offers side canyons which have a great recreational and ecological diversity. And we recommend that the upper three miles of Coyote Wash, major tributary of the area, should be included in the Bureau's recommendation and that any very minor ameliorations of the presence of man be made in that upper section of Coyote Wash. And, also, a small portion of Niaswonger Mesa, which is suitable and meets wilderness criteria, also should be added.

DE-7 (139)

Finally, we would like to close by adding our comments to those comments of the other Sierra Club Groups that have spoken here and to the Rocky Mountain Chapter. And we would like to support the Bureau not only in its graciousness in bringing hearings to the front range on these

areas but also to its recommendations in the planned portion of--under discussion tonight, for its strong stand in creating the Anasazi ACEC, and for its other recommendations in the area of cultural protection.

Thank you very much.

MR. BELISLE: The next speaker is Rosalind McClellan.

MS. McCLELLAN: My name is Rosalind McClellan, R-o-s-a-l-i-n-d, McClellan, M-c-C-l-e-l-l-a-n. I live at 483 Marine in Boulder.

I wanted to thank--well, let's see. I represent the Colorado Wilderness Network, a coalition of Colorado Conservation Organization whose most recent project has been the Colorado Adopt a BLM Wilderness Program. I've been involved with that program for the last two and a half years working with BLM Wilderness and supporters around the state.

I wanted to thank you for holding a meeting here tonight. And I wanted to be sure that you knew that we are hoping you will continue to hold hearings pertaining to BLM wilderness and general planning in the Denver Metropolitan area. I'm wondering if possibly--as I understand, you had decided for a while not to hold one here, thinking that people in this area are not as interested in remote west slope areas. There are people in this room who, at the drop

of a hat, will drive to the other side of the state to visit a wilderness area. And, since operating under the BLM, many of the areas we do visit are the BLM areas. So, I want you to be sure that you know there is a very large constituency in this area for BLM wilderness and that Grand Junction and other resource area meetings will be continued to be held in Denver.

As an example of the constituency, there are probably twice the number of these people here tonight who are here who could not be here because of the scheduling conflicts and who will be writing letters. So, we really do have a lot of supporters in this area.

I wanted to talk about, first, a concept that I'm sensing is becoming more prevalent in BLM planning which, I guess, is called intensive management. And I think it's a good idea when it applies to areas which are not potential wilderness areas. I think you've done a good job in identifying a great number of sensitive areas in the San Juan-San Miguel Resource Area that have riparian, habitat, archaelogical, and other kinds of resource values and applying a very flexible, wide range of management prescriptions for them, Resource Natural Areas, Outstanding Natural Areas, ACEC's, the archaelogical protection, a huge range of administered protections, which, I think, is very appropriate. And I'm sensing it's something of a departure

or growing way of dealing with BLM resources. And I think it's good because it allows for some development but also with an eye for protecting important values.

What I'm concerned about is I think that approach may have spilled over into your thinking about the wilderness areas. I think that it--sort of philosophically speaking, that approach that you can, on the one hand, extract minerals and, on the other hand, put everything back the way it was puts us into the position of being--of thinking that we can take nature apart and then put it back together the way it was. And I think that is very much against the original purpose of the Wilderness Act. And the fact that seven of your wilderness study areas have been recommended for very tricky sorts of protection but which are not actually the real McCoy, it is an inaccurate approach. Let's see. I guess, basically, I feel that it undermines the notion of wilderness. And, if we're only talking about 10 percent of our whole resource area, for you to squander that tiny percentage in protections which I feel are going to be flimsy and subject to the whims of the next district manager or the next administration is not valuing that resource and not respecting the concept of hands off for at least a tiny percentage of BLM lands.

An example of this is the notion that you can--that you can have road closures; you can have road

building for mineral development and then have those roads closed to ORV entry to protect archaelogical sites. And you even go so far in your document to say that, when wilderness--the increase in wilderness use which will come from wilderness designation will actually have adverse impacts on the archaelogical values. There are studies which show that there is a close correlation between numbers of roads and archaelogical vandalism period, especially since funding for enforcement of road closures is always uncertain. I feel uncomfortable that you are going to try to keep those archaelogical sites protected administratively. Wilderness designation would be a much more certain way of doing that.

Just a general comment on the Resource Management Plan. I was struck with the very narrow range of choices you gave us to consider and choose among. I'm sure you were trying to avoid laying out alternatives that were too extreme or couldn't be managed in some way. But, just looking at percentages in terms of area set aside for ORV or ORV closures, 75 percent to 90 percent are recommended for--as being opened to ORV, depending on which alternative. That sounded a really large range. We would like to have seen a much smaller amount of acreage opened to ORV in one of your alternatives.

DE-8 (133)

DE-9 (103)

Same with grazing. You have a range of area recommended to be maintained in poor condition that goes

between 27 percent and 36 percent, which, again, is a very large range. And we feel it's too much anyway.

DE-9 (103)

Mineral leasing is where I see the least choice. You have--the preferred alternative recommends 68 percent to mineral leasing under the standard stipulations. It's actually closer to 90 percent when you include the seasons. And, then, 65 percent for the resource conservation alternative and 70 percent for the resource utilization alternative. To my mind, that represents really no choice at all, and, I think, actually, in some way, reflects a mineral--what I consider to be an over-emphasis on mineral development that is coming straight down from Burford in the national office of the Department of the Interior.

DE-10 (80)

Reading the mineral sections of the Resource Management Plan, I was reminded of a conversation I had with Frank Salwerowicz last September on the merger between the Mineral Management Service and the BLM where they made a couple of interesting statements, one which was that the BLM has always, before, analyzed the impacts that mineral development will have on natural resources. And, now, the emphasis was going to also be on the impacts that preservation of natural resources will have on mineral development. And I saw that in the document that, indeed, you have told--tried to estimate the amounts of tonnage of coal or the barrels of

oil and gas which will be foreclosed by protection of natural resources.

The other thing that was said at this meeting was that the directive--I gathered the policy directive coming down from the n ce is that mineral development will be allowed unless there is an overriding reason not to allow it. And I feel that's very much reflected in percentages of acreage open to oil and gas development in this plan, 90 percent, basically, including the seasonal restrictions. More than 90 percent of the area is open to oil and gas leasing. Only 3 percent, less than 5 percent, is closed to any leasing. And I think that speaks for itself. I think that's a wrong emphasis on priorities.

I also was struck with a sentence in there several times--repeated a number of times--that, even in the resource utilization alternative where you have tremendous amounts of acreage open for oil and gas leasing, that there is still to be projected a significant long-term adverse impact to mineral development, because of the acreage, the 3 percent, I presume, which is not open. I understand there are a lot of restrictions on the oil and gas, but, nevertheless, I thought that was an interesting statement.

One other just parenthetical statement, where you are dealing with unitized gas fields, I think it's really important to require development plans from oil and

gas companies to avoid duplicative, unnecessary road building and haphazard, random building all over the landscape. I don't know if you are--I didn't read every word, so I don't know if that's in there or not. But I would strongly recommend that.

As for the wilderness recommendations, it seems to me that--I mean, if someone were imposing a quota system on your recommendations, it would certainly make sense because you have recommended about the same percentage of wilderness acreage in your resource area that most of the others have. Some have been a lot lower; some have been a little higher. But the average, according to my very rough calculations, that have been recommended in this state to date is about 20 to 25 percent. It makes one wonder whether there's some arbitrary figure being used to determine the amount of acreage. To my mind, this very low--this consistent low recommendations that we're seeing is a reflection, again, of national policy.

Just last--well, two weeks ago, there was an oversight hearing during which Secretary of Interior William Clark was grilled on abusive policies on BLM study areas. You're probably aware of it. And a lot of that had to do with actual development in wilderness study areas. I feel that the low acreage that is being recommended is part of that same policy.

Just to throw out a few figures to put it in perspective, 1 percent of this state, 750,000 acres, is under study by the BLM for wilderness designation. If we're looking at 20, 25 percent of that being recommended, that's less than 1 percent. That's a tiny fraction of 1 percent. Within the resource area itself, we're looking at only 10 percent of the entire acreage as even eligible for wilderness. And you are talking about recommending only 25 percent of that for wilderness. So, to my mind, the 8 percent of acreage that would be closed off to minerals--I gather that's the percentage--by wilderness designation of those areas, is not--could not be that important compared to the wilderness values that you are foreclosing by that type of recommendation.

It's surprising, in particular, such a low--such a seemingly unwarranted low wilderness recommendation when all those other seven areas that are not being recommended have been given very careful other protective statuses of different kinds. I mean, Cross, Cahone, and Squaw/Papoose have no surface occupancy. They have closures to ORV's. They have special management for archaeological and wildlife habitat. You're basically planning to manage those areas as defacto wilderness without actually recommending them for wilderness. No surface occupancy, apparently, will not allow mineral development anyway. So, it's puzzling to us why you wouldn't

DE-11 (138)

DE-11 (138)

just go ahead and recommend them as wilderness since they are also not going to foreclose a great amount of mineral development.

Another thing we're concerned about is the lack of rationale. I didn't read every word. But I read enough of the Technical Supplement to see that you don't go whole hog in spending pages and pages in explaining why your preferred alternative repeatedly says no wilderness, no wilderness in each case. The Glenwood Springs Resource Management Plan, the Kremmling Management Plan, most of them have made at least a pretext of trying to explain why they are not recommending these wilderness. It's particularly noticeable in light of the very flowery and laudatory language that appears, for example, in the appendix to the Technical Supplement where the wildernesses are just extolled for their fabulous, unique resources and their special ecosystems and their unique combinations of topography and this and that and, then, not to have it clear in the text why, nevertheless--I understand the pre-FLPMA leases; that's kind of a problem. But, in the case of Weber, Menefee, and McKenna Peak, certainly, I feel that--I'd like to see you put more in about why those pre-FLPMA leases in Squaw/Papoose and Cross, Cahone are such a problem.

DE-12 (50)

The other thing is that, again, I think we're seeing here a tendency, possibly, for the BLM to use

manageability problems--to exaggerate manageability problems as a pretext to exclude wilderness.

Do you want me--I could stop and maybe--

MR. BELISLE: It's making noise, but it's okay, I guess.

MS. McCLELLAN: As an example, pre-FLPMA leases in Weber, Menefee are used as a pretext for saying that they will be unmanageable as wilderness. It also says, within two years, all those leases will have expired. If you now say that those areas should not be recommended for wilderness, you are preempting the right of Congress, which will be looking at these areas three to four years from now to see if, in fact, those leases still are a problem. I would like to see you make some kind of contingency, taking into account that all those leases could have expired within two years, well before Congress will be looking at the areas.

DE-12 (50)

MR. BELISLE: Ros, you're over the time limit. I'll tell you what. We can come back to you at the end, if you want.

MS. McCLELLAN: Okay. I've got a bit left.

MR. BELISLE: I can see you do.

MS. McCLELLAN: I'd like a chance to finish. But I understand.

Thank you for the opportunity to comment.

MR. BELISLE: Thank you.

The next speaker is Jim Morris.

MR. MORRIS: Hello. My name is Jim Morris. And I live at 1975 Norwood in Boulder 80302.

And I wanted to ask a couple questions. Maybe I could start with questions.

MR. BELISLE: You'll have to address those questions to me, and I'll--

MR. MORRIS: Okay. Then I'll address the panel instead. Okay. One thing I'm worried about is that the proposed budget seems to cut the staff for the BLM quite a bit. It seems that the Renewable Resources Management and Conservation Budgets have either been recommended for a cut or for (interference). Range Management has lost 30 percent of its personnel, and it's supposed to be slashed by another eighty-five jobs or 30 percent since '81. Let's see. The Wildlife Division will get four million dollars less and lose twenty-five people. Fish and Wildlife have been reduced from 358 full-time equivalents down to 295. The cumulative cut by next year, if another twenty-five people are sacked, will be 25 percent. Similar reductions have occurred for Soil, Water, and Air Conservation and for Recreation. Recreational Programs will lose fifty-five people at a time when recreational use of public lands is increasing. Wilderness Studies and Management will be cut by a million dollars compared to this year.

It seems, if you are planning to rely on administrative protection of archaelogical and ecological attributes of your areas, you can't do that if one administration is cutting your budget and your personnel. And, therefore, I would like to echo the recommendation of the others that you go for wilderness rather than administrative protection.

I think that you guys are in a special place. If I mess up at my job, I might have some customers upset or some people I work with. But the quality of the land and the quality of the wildlife left in the country isn't going to suffer much. At all, really. I mean, most people who work for the government, maybe someone will lose some money if a letter is not delivered on the right day, or someone will worry about a loved one, but it won't be the topsoil will be eroded or endangered species will become fewer in numbers and so on, so your job is very important.

I've got a couple--let's see. I went down the Dolores once on a raft trip and hiked up Coyote Gulch and liked it a lot. I'm sorry to hear that the irrigation canals may not be completed so that the dam may not enter its final stages, I guess. I've been reading about mountain lion populations decreasing in New Mexico, so I think it's particularly important that Weber and Menefee Mountain should be designated wilderness.

I would like to reintroduce peregrine falcons. And it seems that, with all the rare species in your area, the whooping cranes that migrate through to the Grace Lake, the sandhill cranes--I guess there's rainbow trout and wolverines, river otters, linxes, spotted owls, and so on--I think all these areas should be protected. They should all be made wilderness. Even black-footed ferrets could be reintroduced and river otters, I guess. There aren't many black-footed ferrets, and there isn't any recovery--I don't think they're trying to artificially increase the propagation or anything, but, if they do, perhaps some day they could be reintroduced.

Mr. Brenner mentioned something earlier about Chaco Canyon. When I was down there, people said that the one version of what happened of the society in Chaco County was that cutting back of the vegetation, the trees and so on, for construction and firewood caused the increased runoff. And the increased runoff deepened the streambeds, increased side stream erosion, the sponge-like ability of the riparian plant community to moderate floodings and dry spells was lost, and that the culture failed because it could no longer manage its water resources. So, I think it's very important in the decisions you make that you try to protect the riparian zones so that we don't have the same thing happen to us.

Let's see. Someone earlier was saying about coal leasing. I've been in the New Mexico BLM WSA's, the ones near Bisti and the neighborhood. And it just doesn't make sense to me that we should try to lease more coal when coal companies that are running into their ten-year--I think--is it a ten-year diligence requirement or something?--there's currently a law that says you have to make good attempts to develop your coal leases. And people are trying to repeal that part of the law because they're not developing their coal, because it's not economic. But, if they're not developing the leases they already have, why should we lease more coal to them? It doesn't make any sense, really.

I've really enjoyed the BLM areas in Colorado and New Mexico. They've been much wilder. There's been more wildlife. Rattlesnakes have startled me. I've seen petroglyphs and pictographs--I don't know what they're called, but the very same thing--various Indians put on the rock and stuff. And I've really liked it. It's been very special, more special than hiking up on the hard rock areas in the forests. So, I hope you guys can do a good job.

I think--I hate roads. I saw a deer dead on the side of the road tonight. And deer aren't my favorite species or anything. There are maybe too many of them. But the more roads we build, the more road killings there will be and more degradation of everything else. And I can speak

from experience because, getting into some WSA's, some of the streams were too deep--and I had a four-wheel drive vehicle at the time--and I couldn't get across right where the road was. It's very tempting to try and go upstream and ford the stream somewhere else and run over a lot of plants. And I did that once and wished that I hadn't. And I think that roads in wilderness areas are sort of addicting. And they shouldn't be put there because they're going to--I don't know--what's the word? What do they say? Somehow it's working on our weak side. I can't really express it. But you shouldn't tempt people, I guess.

Okay. My questions have to do with--shall I say them to you or--

MR. BELISLE: You can ask them now, or you can ask them later.

MR. MORRIS: Do you have an idea of how many family farms there are amongst the cattle ranching operations in this range and to what extent the corporations or sole proprietors are living within the same county where the farms are? I wonder to what extent various decreases or changing--changes in range management will affect what I view as family farmers and to what extent it will affect someone--

MR. BELISLE: The way to ask that question would be to--when you provide a written comment to the Bureau of Land Management on this EIS, raise that question

and ask how that would affect decisions that were made or proposed to be made in the Draft. This is not the time to ask those kinds of questions.

MR. MORRIS: So, I wanted to find out what kind of ranchers are grazing cattle. Are they small farmers or large--

MR. BELISLE: Do you want to address that.

MR. MILLER: It's not a question, I guess, we could answer right here and now.

MR. MORRIS: Just an intuitive feel for it, maybe?

MR. MILLER: No. I guess I wouldn't want to give you a feel for that because I'm not sure I could give you the right feel. If you give it to us in writing, then we can get with our specialists that deal with that and respond more effectively.

MR. MORRIS: Okay. Good. So, what would the specialist's name be or something?

MR. MILLER: You can write the letter to me. And I'll give you one of my cards.

MR. BELISLE: Do you have a copy of the EIS? The address is written in front of it. Or you can--

Did you have any questions that you wanted to ask him?

THE PANEL: No.

MR. BELISLE: The next speaker is David Walder.

(Interruption.)

MR. BELISLE: Go ahead.

MR. WALDER: My name is David Walder. My address is 969 Tenth Street, Boulder 80302.

And I want to add my thanks to the BLM for holding a hearing here in the Denver area because it allows a lot of people who use the lands to have some input. And I'd also like to add that I fully support what the representative of the Colorado Wilderness Network was saying, and, if I make my time a little briefer, hopefully she can maybe add a few more comments.

I'm going to talk mostly about just the wilderness. And I visited the Dolores River area, and it's wonderful. And I really appreciate adding that--recommending that as a--for wilderness. I walked barefoot up Coyote Wash, and it's just an experience that is just rare and unique and very special. And I'd also hope that you would add this few acres that you didn't include in the area, didn't include in the recommendation, for that would complete the area.

But I'm really dismayed about the small amount of the wilderness recommended in the whole report. It's hard to understand why a lot of the times since you didn't really document good reasons why. I mean, there are

some pre-FLPMA leases. But, other than that, I don't see a lot of the conflicts that some of the other resource areas have and have to deal with. And they're just not apparent in this situation.

And, to some people, you know, wilderness might be abundant in this area. I mean, it might seem that way just because there's all these different areas being recommended, and, yes, if we have one star area, that would fulfill a requirement. But Colorado has to really fulfill a lot of the wilderness for the whole United States. And the west slope has to take care of the east slope. Just on the front range we're already into a permanent system in at least the Indian Peaks area, which is right near where I live, and it's getting crowded. And the need for wilderness is going up. It's going up. And I want to really emphasize that because it doesn't seem to be getting through that the public really wants wilderness. And the public agencies that are supposed to be administering for the public are not listening. And, if they are, they're definitely not acting in concert to this very strong need.

And, you know, as everyone has said before, wilderness, we can't invent it and all that stuff. It's there and we have to preserve it before we lose it. And, if people are worried about having too much wilderness, Congress can always just pass a law and say, look, we don't have as

much wilderness. It's something that lets us have options in the future.

And--let's see. And, again, I'm very concerned about the possible reasons for not recommending as much wilderness as perhaps should be recommended, as I believe should be recommended. And, if they're not clearly stated, that really leaves the public guessing, and suspicious, I might add. And I know you guys might be in a very difficult spot having to deal with pressures from the public and also from different levels above you in the Interior Department. But it's definitely something that somebody has to take responsibility for. And, if you don't, then, you know, the public is really suspicious, and your actions are suspect. And I don't mean to put it, you know, as--as you people are not fulfilling your duties, but somebody isn't.

And my understanding of the BLM is that the local does the recommendations on their own and then sends it up. And the National Director is not supposed to--maybe I have this wrong, and you can correct me--is not supposed to direct these individual studies. But it's supposed to, then, recommend them to the President as the Director believes they should be. And, so, if you are not acting independent as you should be, then you're not fulfilling the public duty. And I think that's a really important thing. And that's

about all.

Thank you.

MR. BELISLE: Thank you.

That was the last speaker that signed up to speak. Is there anyone here that wishes to speak?

QUESTION: Do you guys want to speak and say what you think of your plan?

MR. BELISLE: We can discuss that after the meeting. This is a public hearing. It's not a question and answer session.

No one else wishes to speak?

In that case, I'll call Ros and let you have another ten minutes.

MS. McCLELLAN: Well, it doesn't have to be ten minutes.

MR. BELISLE: Do you want to restate your name for the record.

MS. McCLELLAN: Rosalind McClellan. I appreciate having a few more minutes. I'll try not to bore you. I wouldn't want you to have come all this way and, you know, not to have heard a lot.

The other thing, just in terms of manageability and the way it's used, in my opinion, and possibly to exclude areas, I would like to have seen the document explore the possibility of the boundary adjustments

where pre-FLPMA leases are raising obstacles and could be taken care of by boundary adjustments. For example, in Squaw/Papoose Canyons, again, I'm wondering whether problems with pre-FLPMA leases and the manageability problems they pose could have been dealt with more creatively. In the case of--I think it's the Ah-shi-sle-pah Wilderness Study Area and the Bisti, they have--I think it's close to being consummated, a trade--I forget whether it's Sunbelt--or one of those companies is trading out its coal lease for a lease outside of the wilderness study area, making the existence of a pre-FLPMA lease no longer such a problem. I'd be very interested to know if that could be done in those two areas since they do represent such a tiny proportion and fragment of the still pristine lands in this resource area.

DE-13 (51)

The other, maybe--maybe one of the reasons that you are excluding so many areas from wilderness recommendation is the idea that it will foreclose mineral development. Again, I'd like to see that better explained. I'd like to know, for example, what the probability that those pre-FLPMA leases will get developed is. Nationwide, only 3 percent of oil and gas leases in wilderness areas ever do get developed. I'd like to know what percentage of the oil and gas reserves in this resource area and planning area actually are inside wilderness boundaries. Nationwide, only 1 percent of oil and gas reserves exists inside

DE-14 (81)

wilderness areas.

And the other question I would like to know is what percentage of minerals, leasable, locatable minerals, in your resource area would be tied up, locked up by wilderness designation. Elsewhere, the nationwide figure, I think, is 70 percent of U. S. oil and gas reserves are not on Federal land, I think.

DE-14 (81)

Okay. Anyway, there's--I'd like to know, in the San Juan-San Miguel Resource Area, how much of the mineral resource could be developed if all those areas were recommended for wilderness. It does say that 8 percent of the area would be closed off to--to mineral development if all the areas were recommended. And, if I've overlooked where it says what percentage of the estimated total of coal and oil and gas resources would be closed off, let me know. I just didn't see it in my reading.

DE-15 (82)

Just to quickly reiterate, Squaw/Papoose, Cross, Cahone Canyons have a unique type of ecosystem that's not represented anywhere else in the National Wilderness Preservation System, the Great Basin sagebrush type of vegetation. Similarly, the Menefee, McKenna Peak has a very unique, as you admit, a very unique combination of vegetation types.

Just to close, I wanted to just sort of express my own personal impressions of the four areas I have visited

down there, Dolores River Canyon, Cahone, Menefee, and McKenna Peak. Like some of the other wilderness areas, BLM areas, in the state I visited, I was struck by the tremendous experience of contrast they provide, contrast in the near, the foreground, and the distance, between light and dark, between shadow and sunlight, between highs and lows, just about any kind of contrast you would want to experience. You go, in a very short time in these areas, through tremendously contrasting landscapes, riparian to high mesas to canyon bottoms to the tops of cliffs. It's very exciting hiking. It's something that National Forest wilderness does not offer. It's very invigorating. Just the feeling of textures, the mud in some places and the dryness and the cactus and the rocks and the moss. It's a very sort of tactile experience. Again, the National Forest--this is--the National Forest wilderness areas don't provide this. The BLM wilderness does. It has a lot of wilderness experiences and can offer them that have not yet been introduced into the National Wilderness Preservation System.

The orienteering, you know, since many of them don't have trails, this is very unique. And people need an opportunity to have enough land that's still like this in another generation. Now, then, also, of course, the seasonal advantage, these areas are open for hiking when other areas during the off-season--when other areas are not.

So, just to close, I wanted to say that we recommend the resource conservation alternative but with a reduced amount of acreage open for oil and gas leasing, with all eight areas recommended for wilderness, with a larger degree of the entire resource area closed to ORV use. Generally, I think the range of choice is slanted upward in the direction of resource development.

So, I appreciate your giving me a few more minutes.

MR. SERING: Ros, just one question. You mentioned there are two wilderness study areas that you would like us to look at as far as possibly exchanging leases or as far as working out with the companies. You mentioned one area, the Squaw/Papoose. But you didn't mention the second one.

MS. McCLELLAN: I guess I meant to say Cross and Cahone. I gather those are where the pre-FLPMA leases are fairly difficult to deal with. I gather their distribution is sort of scattered about, and they're unitized so that they aren't about to expire and that kind of problem.

MR. SERING: Okay. Thank you.

MR. BELISLE: Thank you.

Is there anyone else who wishes to speak or add to their previous statement?

The hearing record will remain open until August 1, 1984, and written comments may be addressed to the San Juan Resource Area Office, Bureau of Land Management, Federal Building, Room 102, 701 Camino Del Rio, Durango, Colorado 81301.

I thank you all for coming, and, for those of you who did make your statement, I thank you. And the hearing is adjourned.

(The hearing was then adjourned at the hour of 9:00 p.m., this 28th day of June, 1984.)

I, Linda C. Cooper, Certified Shorthand Reporter, do hereby certify that I reported in stenotype the proceedings had at the time and place hereinbefore set forth, and that the foregoing sixty-nine (69) pages constitute a full, true, and correct transcript of my stenotype notes of said proceedings.

Dated this 16th day of July, 1984.

NOTARY PUBLIC STATE OF COLORADO LINDA C. COOPER

Linda C. Cooper
Certified Shorthand Reporter
and
Notary Public

My commission expires May 29, 1987.

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statements you may have. If you have an extra copy, please give it to her just prior to your presentation.

If you do not have an extra copy, you may leave a written statement you might have with the reporter after your presentations, she has assured me that if you will place your name and address on the statement, she will return it to you.

The record of this hearing will be available for public inspection at the San Juan Resource Area Office, Bureau of Land Management, Federal Building, Room 102, 701 Camino Del Rio, Durango, Colorado, 81301, approximately 25 days following the hearing.

If there are any questions of the hearing procedure, we will answer them now. Do you have any questions.

MR. KOON: No.

THE CHAIRMAN: Do you wish to make an oral statement?

MR. KOON: Briefly.

THE CHAIRMAN: Please begin your oral statement by stating your name, your address, the organization you represent, if any?

MR. KOON: Okay. My name is William Koon, K-o-o-n, Box 486, Naturita, Colorado.

I own an operate and Dry Creek Basin General

Store in Dry Creek Basin, and Frenchie's Mountain in Dry Creek Basin.

Frenchie's Mountain is an outfitting organization. I have outfitted in Colorado, since 1969 Licensed, and I am certified.

McKenna Peak and the Dolores River Canyon are the two areas in my back yard, that I use, and appreciate.

I agree with your designation of both areas, my only question about the McKenna Peak area is that possibly there are some recreational or more recreational values there than the BLM is aware of. The wild horse herd I am sure you are getting plenty of information on it, but maintaining a 50 horse herd in that area will have significant value to people like myself who do take trail rides and people in to see that herd of horses.

The one area that concerns me of course is licensing or permitting licensed outfitters on the BLM. I am in agreement with that, I hope that the BLM will see that a permitting system as a system of utilizing outfitters to help vacationers or recreational use of that land with better control. Rather than just saying the outfitters and that permit system is another headache to have to manage.

I think it's a real opportunity for the BLM and for the outfitters, also to educate and introduce people to a given area, and introduce them not only to the values there, but just to the problems in management also.

Here again in regard to the wild horses, and the problems in managing a herd of horses of that type in a area like that.

My only concern is that it could be possible to use that a permit system in such a manner that it would be difficult for the outfitter to perform within the rules and regulations and it could be a method of discouraging outfitting, rather than encouraging someone in a sense to help you control recreation, and also help you pay for it, that control.

It winds up being volunteer program that really that not only furnishes the volunteer but help you pay for the administration of the volunteer program.

The management of the wild horses in that Spring Creek herd, or McKenna Peak herd, whichever you prefer to call them, and also the Naturita Ridge herd is of concern also to a group of us who do outfitting in that area.

The danger I see there is that you can wind up with a lot of pressure from the ranchers who would like

to see them minimized or eliminated, and from the preservationists who would like to see them multiply and be completely uncontrolled, and hopefully you don't get into a squeeze between those two points of view, the point where you are managing with -- because of those two pressures rather than because of knowledge and understanding of the horses, and their contribution, or their detrimental effect on the area.

There are a number of us in that area who have some knowledge of the horses and do spend quite a lot of time with them, and possibly in the volunteer program, maybe you can consider the possibility of using a organization such as mine, that I don't pretend to be a expert myself, but I do have some people involved in our organization either as employees or advisors who -- we have an animal biologist, and rancher, and several different people who do have expertise, possibility of using them in a volunteer program of some sort to maybe gather a little more information on both of those herds.

For example, one of it things I was thinking about was. I would think that there would be a good possibility in that Spring Creek herd to bait and trap some horses possibly easier than using the roundup technique. That area is going to be a tough area to use a roundup technique because of the erosion and the

broken condition of the ground surface.

And maybe if we could cooperate, since I live there, maybe we could do a little experimenting in a period of time before the roundup became a fact. And might be possible to do some baiting and some trapping, and might be a lot cheaper.

Another thing that might be possible to do some fecal sampling at different periods of the year not only from the horses, but from the deer and elk, and domestic livestock also, and see what types of forage are being utilized by what, and where the competitive -- where there's a problem in competing for food. And maybe we could identify some problems, and maybe there are some areas where there are not as many problems as maybe we are thinking at this time.

And with that kind of facts to deal with, and answers, and with the Division of Wildlife, and with us, on a basis of knowledge, rather than -- rather than pressures, and attitudes.

Other than that I hope that we can just continue with the outfitters on the cooperative basis with the BLM and be any help to you, work on that basis rather as antagonistic basis.

Thank you.

THE CHAIRMAN: Thank you.

You have any other comments?

MR. KOON: No.

THE CHAIRMAN: Since nobody else is here, the hearing record will remain open until August 1st, 1984, and the written comments maybe addressed to the San Juan Resource Area Office, Bureau of Land Management, Federal Building, 701 Camino Del Rio Durango, Colorado, 81301. This hearing is closed.

(WHEREUPON, the following hearing was adjourned at approximaetly 2:35 p.m.)

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